

# **Friedrich List's Heart, Wit and Will:**

Mental Capital as the Productive Force of Progress

A dissertation presented by

Arno Mong Daastøl

Cand. Oecon. & Cand. Mag.

- in partial fulfilment of the requirements for the degree of

Doctor rerum politicarum (Dr. rer. pol.)

in the subject of Economics

to

Universität Erfurt,

Staatswissenschaftliche Fakultät

Erfurt, Germany

[www.uni-erfurt.de](http://www.uni-erfurt.de)

November 2011

urn:nbn:de:gbv:547-201300317

# Contents

<i>0.0 Preface</i>	<i>10</i>
<i>1.0 Life and works</i>	<i>20</i>
<i>2.0 Inspiration and method</i>	<i>31</i>
<i>3.0 Critic of materialism</i>	<i>88</i>
<i>4.0 Productive force</i>	<i>179</i>
<i>5.0 Regulation</i>	<i>277</i>
<i>6.0 Protection and nurture</i>	<i>337</i>
<i>7.0 Sovereignty and international power</i>	<i>409</i>
<i>8.0 Summary of criticism and conclusion</i>	<i>503</i>
<i>Appendix 1 The Logic of List</i>	<i>510</i>
<i>Appendix 2 Index of List's treatment of various issues</i>	<i>517</i>
<i>Appendix 3 Larger quotations from Friedrich List</i>	<i>519</i>
<i>Appendix 4 Underconsumption and credit</i>	<i>532</i>
<i>Bibliography</i>	<i>543</i>

# Contents – detailed

<i>0.0 Preface</i>	<b>10</b>
0.01 Background	<b>11</b>
0.02 Recent interest in List	<b>13</b>
0.03 Abstract	<b>15</b>
0.04 Chapters	<b>16</b>
0.05 Title	<b>18</b>
0.06 Quotations	<b>18</b>
0.07 JEL classification	<b>18</b>
0.08 Acknowledgments	<b>19</b>
<i>1.0 Life and works</i>	<b>20</b>
1.01 Summary	<b>20</b>
1.02 List's background and education	<b>20</b>
1.03 Intellectual Environment	<b>21</b>
1.04 Political and economic struggle	<b>22</b>
1.05 Forced emigration – international learning	<b>25</b>
1.06 Return to Europe	<b>27</b>
1.07 List's later publications and work	<b>29</b>
<i>2.0 Inspiration and method</i>	<b>31</b>
2.01 Summary	<b>31</b>
2.02 The moral base for industrialisation and urbanisation	<b>32</b>
2.03 List - a practical Idealist	<b>33</b>
2.04 The core of List's ideas: Freedom	<b>35</b>
2.05 Freedom in the German tradition	<b>36</b>
2.06 Progress in Western Culture	<b>40</b>
2.07 Progress and development	<b>42</b>
2.08 Believer in progress	<b>43</b>
2.09 List's partial conversion from 'free trade' – according to List	<b>47</b>
2.10 The Mercantile- and the Manufacturing System	<b>50</b>
2.11 Colbert's legacy	<b>51</b>
2.12 Napoleon's legacy	<b>54</b>
2.13 The American System	<b>56</b>
2.14 The Industrial System - and national unity	<b>62</b>
2.15 Economic Nationalism	<b>64</b>
2.16 Theory and practice	<b>67</b>
2.17 Comparative- and historical method	<b>67</b>
2.18 Realist and Idealist Methods	<b>69</b>
a) Descriptive versus normative - Knowledge versus ethics	69
b) Empirical Idealism	71
2.19 The rational, materialist, and analytical method	<b>72</b>
a) Sense data and measurement	74
b) Measurement and egotism	75
2.20 Reductionism	<b>77</b>
2.21 English Nominalism versus List's Realism	<b>81</b>
a) English Nominalism	81
b) Social Nominalism	82
c) Nominalism in Economics	82
2.22 Methodological individualism and instrumentalism	<b>85</b>
<i>3.0 Critic of materialism</i>	<b>88</b>
3.01 Summary	<b>89</b>

3.02 Develop theory against Smith	<b>91</b>
3.03 Smith's system, according to List	<b>92</b>
a) Promoting reductionist individualism - ignoring institutions	93
b) Promoting a passive state – ignoring regulation	94
c) Promoting Free Trade – ignoring the Nation	95
d) Focus on material wealth; Value of exchange	97
e) Promoting a private shopkeeper's system	97
3.04 Materialism ignores mental powers	<b>100</b>
3.05 Material capital - less important	<b>100</b>
3.06 Physiocratic materialism: No-money, barter economics	<b>103</b>
3.07 Counterproductive saving	<b>105</b>
3.08 Introduction of money - hoarding	<b>107</b>
3.09 No gluts in the classical school	<b>108</b>
3.10 Consumption and dissatisfaction is key, not saving	<b>110</b>
3.11 Productive consumption	<b>112</b>
3.12 Smith ignores distribution and consumption	<b>113</b>
3.13 Generalisation and abstraction	<b>115</b>
3.14 The paradox of generalisations – appropriate question	<b>118</b>
3.15 Real estate - the forgotten market	<b>118</b>
3.16 Epistemology and the English Classical School	<b>120</b>
3.17 Towards 'monetarism': The theory of 'values of exchange'	<b>122</b>
3.18 Ricardo's monetary abstraction	<b>123</b>
3.19 Exchange value versus productive powers	<b>125</b>
3.20 Smith's inability to differentiate: Generalisations	<b>127</b>
3.21 Differentiate global- from national economics	<b>127</b>
3.22 Differentiate exchange value from productive powers	<b>128</b>
3.23 Differentiate cause from effect: Mental powers	<b>128</b>
3.24 Differentiate cause from effect: Civilisation	<b>130</b>
3.25 Differentiate cause from effect: Nation	<b>130</b>
3.26 Differentiate cause from effect: History	<b>131</b>
3.27 Smith's short-sightedness 1-4	<b>132</b>
a) Ad 1 and 4): The landed interests - the case of Britain	134
b) Ad 2 and 4): The merchant interests - the Dutch case	135
c) Ad 3 and 4): Public regulation of the merchant interest	135
3.28 Differentiate future from present	<b>138</b>
3.29 Differentiate stages of development: Learning	<b>141</b>
3.30 Differentiate actual from potential	<b>141</b>
3.31 Differentiate raw materials from finished products	<b>147</b>
3.32 Differentiate nations' suitability for industry	<b>147</b>
3.33 Differentiate industries – effects of regulations	<b>148</b>
3.34 Differentiate industries – effects on culture	<b>149</b>
3.35 Differentiate kinds of capital – and labour	<b>150</b>
3.36 Differentiate private versus community interests	<b>152</b>
3.37 Generalisations play down regulation and nation	<b>158</b>
3.38 Critic of Malthus' materialism	<b>162</b>
3.39 Roscher, Schmoller and Schumpeter on Malthus	<b>165</b>
3.40 Malthus and the social question - Distribution	<b>167</b>
3.41 Malthus' assumptions	<b>168</b>
3.42 Malthus' heirs in the English Classical School	<b>169</b>
3.43 Edwin Cannan's criticism of Malthus	<b>170</b>
3.44 Materialist reductionism - breeds ignorance	<b>172</b>
3.45 Reductionism and consequences – a contrast	<b>174</b>
3.46 Empirical evidence	<b>175</b>

3.47 Science, technology, – and politics, define resources	<b>177</b>
<i>4.0 Productive force</i>	<b>179</b>
4.01 Summary	<b>179</b>
4.02 Religion, science and education	<b>181</b>
a) List on religion	181
b) Religion and education: The Reformation	183
c) Religion and science: The Renaissance	184
4.03 Science as elevator of civilisation	<b>184</b>
4.04 Education and power	<b>188</b>
4.05 Education as immaterial bedrock of economics	<b>189</b>
4.06 High productivity has many sources	<b>194</b>
4.07 The primary sources of productivity are immaterial	<b>195</b>
4.08 Immaterial forces as basis for entrepreneurship	<b>197</b>
4.09 Immaterial forces as basis for entrepreneurship	<b>199</b>
4.10 Capital of mind	<b>201</b>
4.11 Accumulated capital of mind	<b>205</b>
4.12 Human Capital	<b>207</b>
4.13 Knowledge and information economics	<b>210</b>
4.14 List's predecessors - Conservatism and Romanticism	<b>211</b>
4.15 Comments on List's approach to Capital of Mind	<b>213</b>
4.16 The Historical School on Capital of Mind	<b>218</b>
4.17 Marx's orthodoxy – algebra of exchange value	<b>222</b>
4.18 The Austrian School – Mises on the human mind and Capital	<b>224</b>
4.19 Growth theory – thought as the lacking source	<b>227</b>
4.20 National innovation systems - based on mental capital	<b>232</b>
4.21 Confederation of Labour	<b>239</b>
4.22 Mental side of transportation	<b>244</b>
4.23 Urbanisation furthers communication, innovation and freedom	<b>246</b>
4.24 Networking and Social Capital	<b>249</b>
4.25 Perfecting the balanced harmony of productive powers	<b>250</b>
4.26 Communication furthers urbanisation; wealth and culture	<b>252</b>
4.27 Competition promotes innovation	<b>256</b>
4.28 Communication furthers innovation - and vice versa	<b>257</b>
4.29 Freedom promotes innovation, communication and efficiency	<b>260</b>
4.30 Industrialisation fosters freedom and a humane civilisation	<b>261</b>
4.31 Social well-being improves economic efficiency	<b>265</b>
4.32 Efficiency and value of resources	<b>270</b>
4.33 Production of energy and machines	<b>271</b>
4.34 Productive public credit in a sound credit system	<b>272</b>
<i>5.0 Regulation</i>	<b>277</b>
5.01 Summary	<b>277</b>
5.02 Transaction costs of interrelated branches	<b>280</b>
5.03 Public goods	<b>282</b>
5.04 Global public goods	<b>284</b>
a) Tariffs and international trade agreements	285
b) Strategic state procurement	286
5.05 Natural Rights and 'the selfish system'	<b>287</b>
a) Natural Rights	287
b) 'the selfish system' of irrational man	288
c) Rational and moral perfection	291
5.06 Perfecting the State	<b>291</b>
5.07 Hegel and the nation - the quest for liberty	<b>294</b>
5.08 Hegel's liking for Civil Society	<b>296</b>

5.09 Conservative liking for Civil Society	<b>300</b>
5.10 Marx's disliking for Civil Society	<b>304</b>
5.11 Marx' dislike of gradual improvement	<b>306</b>
5.12 The bureaucratic pitfall	<b>309</b>
5.13 Law, regulation and economics	<b>310</b>
5.14 Regulation and intervention	<b>312</b>
5.15 List's relation to Law and Economics	<b>313</b>
5.16 List's approach versus Law and Economics	<b>316</b>
5.17 Incentives from law and regulation	<b>317</b>
5.18 List and the public interest	<b>319</b>
5.19 Jurisprudence's obligation to counter vested interests	<b>321</b>
5.20 List's contribution to law and economics	<b>323</b>
5.21 Law, individual freedom and democracy	<b>325</b>
5.22 A pragmatic social-conservative?	<b>326</b>
a) England's constitutional liberties	328
b) Russia	330
c) China	333
<i>6.0 Protection and nurture</i>	<b>337</b>
6.01 Summary	<b>338</b>
6.02 Power rests on productive force	<b>340</b>
6.03 Power rests on mentality - discipline	<b>341</b>
6.04 Power in international trade	<b>343</b>
6.05 Wars promote domestic skills and manufactures	<b>344</b>
6.06 English dumping and export of commercial crisis	<b>346</b>
6.07 Credit as a tool of power	<b>348</b>
6.08 Balance of trade	<b>350</b>
6.09 Commercial crises due to indebtedness	<b>353</b>
6.10 Debt lessons – American; Russian; and present	<b>354</b>
a) America	354
b) Russia	355
c) The British Empire - and the American	356
6.11 Dangers of monoculture – commodities especially	<b>357</b>
6.12 Agriculture most productive	<b>358</b>
6.13 The inadvisability of supporting manufactures	<b>360</b>
6.14 Tariffs shall primarily promote stability of home markets	<b>363</b>
6.15 Protection of fragile mental capital	<b>365</b>
6.16 Stability furthered by closeness	<b>365</b>
6.17 Creation of a home market & feed-back mechanisms	<b>368</b>
6.18 Protecting banks by securing home markets	<b>371</b>
6.19 Tariffs shall secondarily promote skills and liberty	<b>372</b>
6.20 Education tariff – the English model	<b>373</b>
6.21 Newcomers are disadvantaged	<b>375</b>
6.22 Protection furthers security, freedom, and incentives	<b>377</b>
6.23 Protection promotes foreign investment	<b>378</b>
a) England	379
b) America	379
c) Russia	380
d) China	381
6.24 Protection of sovereignty - conditions for sound protection	<b>382</b>
6.25 Differentiate tariffs to stage of development	<b>383</b>
6.26 Differentiate tariffs to national circumstances	<b>386</b>
6.27 Differentiate tariffs to suitable time	<b>387</b>
6.28 Differentiate tariffs to branch of production	<b>388</b>

6.29 Pragmatism - focus on potential and value added	<b>390</b>
6.30 Fiscal income has last priority in tariff policy	<b>392</b>
6.31 Differentiate tariffs - according to ranking order	<b>393</b>
6.32 National monopolies are tools for the public good	<b>394</b>
6.33 Protect against monopolisation	<b>395</b>
6.34 Customs unions counteract monopolies and inefficiency	<b>396</b>
6.35 Transportation and urbanisation promotes competition	<b>397</b>
6.36 Mercantilism promoted competition, efficiency- and profitability	<b>398</b>
6.37 Balance of payments, once again	<b>399</b>
6.38 Protection, once again?	<b>404</b>
<b>7.0 Sovereignty and international power</b>	<b>409</b>
7.01 Summary:	<b>410</b>
7.02 Introduction	<b>412</b>
7.03 War and strategic geography	<b>413</b>
7.04 England's geographical position	<b>415</b>
7.05 English protectionism	<b>417</b>
7.06 Smith as regulator and protectionist	<b>420</b>
7.07 Contradiction between free trade theory and British practice	<b>425</b>
7.08 England's strategy of confusion	<b>427</b>
7.09 England's strategy of domination	<b>429</b>
7.10 Combating Britain's monopolies and unfair treaties	<b>430</b>
7.11 Combatting Britain's monopoly trade with colonies	<b>431</b>
7.12 British strategists substantiate List's claims	<b>432</b>
7.13 British policy after List - the Edwardians	<b>435</b>
a) Socio-political affairs;	438
b) Strategic and military affairs	440
c) Economic affairs;	442
7.14 German awakening	<b>444</b>
7.15 Essential requirements for a sovereign nation	<b>445</b>
7.16 Access to sea, navies and blockades	<b>448</b>
7.17 Railroads and the balance between Land- and Sea powers	<b>450</b>
7.18 'Independent vassalage' and tropical colonies	<b>453</b>
7.19 Colonies, division of labour and free trade	<b>454</b>
a) Natural division of labour	456
b) Colonial goods as a catalyst for activity	457
c) Benevolent imperialism - Occidental tutelage of the Orient	458
d) Colonial free trade	460
7.20 List and German policies	<b>461</b>
a) Against racism	462
b) Against slavery	465
c) Naval armament	465
d) The Anglo-German alliance	466
e) Customs union as expansionism?	467
f) German expansionism	469
7.21 A European defence union	<b>470</b>
7.22 Common interest in free trade	<b>476</b>
7.23 Common interests? – recent development	<b>477</b>
7.24 Curing global market imperfections	<b>480</b>
7.25 A sudden & universal republic of merchants	<b>483</b>
7.26 Global free trade - gradually	<b>486</b>
7.27 A gradual & universal republic of peoples	<b>488</b>
7.28 A universal confederation of nations	<b>490</b>
7.29 From protection to free trade	<b>493</b>



7.30 Promote free trade by international law, treaties and congresses	<b>494</b>
7.31 Contradictions in List's arguments?	<b>498</b>
a) A promoter both of protection and free trade?	498
b) More or less regulation? - State intervention versus free trade	501
<i>8.0 Summary of criticism and conclusion</i>	<b>503</b>
8.01 Summary of criticism	<b>503</b>
8.02 Conclusion	<b>508</b>
<i>Appendix 1 The Logic of List</i>	<b>510</b>
List's logic: Goals and measures	<b>510</b>
The Logic in List's Productive forces	<b>511</b>
CONCLUDING LESSON	<b>515</b>
<i>Appendix 2 Index of List's treatment of various issues</i>	<b>517</b>
a) Policies in general:	<b>517</b>
b) Strategic investment into key branches:	<b>517</b>
c) Differentiated tariffs according to:	<b>518</b>
<i>Appendix 3 Larger quotations from Friedrich List</i>	<b>519</b>
2.21 English Nominalism versus List's Realism	<b>519</b>
3.07 Counterproductive saving	<b>520</b>
3.30 Public regulation of the merchant interest	<b>521</b>
4.26 Confederation of labour	<b>523</b>
6.18 Common interest in free trade	<b>525</b>
6.04 The English strategy of confusion and domination	<b>528</b>
6.25 From protection to free trade	<b>529</b>
<i>Appendix 4 Underconsumption and credit</i>	<b>532</b>
Underconsumption	<b>532</b>
Credit creation adjusted to productive capacity	<b>536</b>
Credit channeling to increase capacity	<b>539</b>
Monetary 'cranks' re-introduce finance	<b>540</b>
Banking and capital control	<b>541</b>
<i>Bibliography</i>	<b>543</b>
Primary literature	<b>543</b>
a) Journals	547
b) Translations	547
Secondary literature on List	<b>551</b>
Related literature	<b>553</b>

## 0.0 Preface

### Contents

0.01 Background	11
0.02 Recent interest in List	13
0.03 Abstract	15
0.04 Chapters	16
0.05 Title	18
0.06 Quotations	18
0.07 JEL classification	18
0.08 Acknowledgments	19

This dissertation is an elaboration of presentations and articles on Friedrich List (Cf. Daastøl, 1995, 1996, 1997, 1998, 1999, 2005, 2007, and 2013 (forthcoming)).

The inspiration of this dissertation may be illustrated by the following quotation from *China Daily*, which claims that the West has forgotten, and needs to relearn the reasons for her former success. China Daily writes,

The world is entering a new era, an era marked by two major changes. The first is the beginning of the end of Western domination - not the end of the West, though. The second is the Asian "renaissance", because the 21st century will be the century of Chinese and Indian economies. These are the words of Kishore Mahbubani, dean of Lee Kuan Yew School of Public Policy at the National University of Singapore. ...

"This is a Western financial crisis," he says, "because the problems are the results of Western leaders' failure to understand that they faced a new competition." Western minds couldn't think that other societies were becoming more successful than them. People in the US and the EU live beyond their means. Does "Western wisdom" say keep borrowing despite mounting budget deficits? The West has to "relearn" Western wisdom from the East, Mahbubani says.

"Asian societies are doing well (today) because they understood and absorbed the main pillars of Western wisdom, including the market, science, education and rule of law. But Western societies are gradually walking away from these pillars." (*China Daily*, 2010, p.9)

This poses the task of finding out more specifically what these pillars consisted in.

The inspiration of this dissertation may also be illustrated by the words of the Trygve Haavelmo, who in his lecture notes in 1962 says that the really mature scientific approach does not consist only in researching existing conditions, but perhaps even more in clarifying practical conceivable alternatives. He added that the main task for economics is not to make new ideas for economic policies, but to achieve,

... real recognition and understanding of the fundamental features of the specific social economy that we live in at any time. (Haavelmo, 1962, p. 6, see also p. 10)

Haavelmo then criticises contemporary economic literature of taking existing institutional relations and conventions as a positive given, thereby limiting the potential for recognition and understanding.

Trygve Haavelmo was also President of *The Econometric Society* (1957). In his Nobel laureate speech in 1989, he suggests starting with the whole, with systems analysis, in other words with methodological holism as opposed to the methodological individualism that has ruled the subject of economics for centuries,

I believe that econometrics can be useful. But ... , depends on good economic theory. ... [and] existing economic theories are not good enough.

I think it is not unfair to describe a major part of existing economic theory in the following way. We start by studying the behavior of the individual ... We then try to construct a model of the economic society in its totality by a so-called process of aggregation. I now think that this is actually beginning at the wrong end. (Haavelmo, 1989)

To be expected, not many paid attention and acted accordingly.<sup>1</sup>

## 0.01 Background

The following section will shortly explain how I decided to study how Friedrich List deals with ‘mental capital’.<sup>2</sup>

---

<sup>1</sup> An internet google search in 2011 for the sentence “I now think that this is actually beginning at the wrong end.” produced three links (in addition to two links to the speech itself) including one link to Michael Hudson’s use of this quotation with a reference to me. (Hudson, 2011) Two links only must be remarkable for a Nobel Prize speech, even though one link was to an article by Professor Timothy P. Roth (Roth, 1999).

<sup>2</sup> Briefly, the concept of ‘Mental Capital’ refers to all products of mental exertion, such as; morality; co-operation; institutions; and inventions.

For further discussions on the concept of ‘Mental Capital’ see especially the chapters and sections (Ch.3): *Material capital - less important; Exchange value versus productive powers; Differentiate kinds of capital*; (Ch.4): *Capital of mind; Accumulated capital of mind: Conservatism and Romanticism; Comments on Capital of Mind; National innovation systems*; and (Ch.5): *Tariffs shall primarily promote stability of home markets; The Careys on crisis; Protection, once again?*

To aid understanding of this core concept of ‘Mental Capital’, a short explanation, with extracts of some larger quotations to come, may be helpful:

In his American works Friedrich List uses the phrase ‘Capital of Mind’ and “mental capital”. In his German works List uses the phrase ‘Geistiges Kapital’. Most often the term is translated as ‘intellectual capital’. But this too has connotations that do not quite cover the original meaning.

The term is perhaps better translated directly, as ‘spiritual capital’, capital

I first studied economics at an elementary and intermediate level, specialising in different arrangements of collective wage settlement. I then took a B.A. in cultural anthropology, sociology, and philosophy. My specialities were, respectively, Africa, organisations and work / industrial democracy, and philosophy of science / rationality. I finished by additionally taking an 'independent' M.A. (actually a more extensive 'State Examination') in economics only, specialising in the methodology of economics.

My master thesis was intended to deal with the effects of different images of man on economic policy. – How our human selfimage is projected on practical policy – essentially idealism<sup>3</sup> versus materialism;<sup>4</sup> Man as 'spiritual' versus 'mechanical'. But since few economists deal with these issues, the closest option was to deal with the methodology

---

that is related to the human spirit. In the German language, however, 'spiritual' does not have the same connotations as in English, since e.g. the human- and social sciences are often all termed 'spiritual sciences' ('Geisteswissenschaften'). In other words, 'spiritual capital' ('Geistiges Kapital') here refers to what we in English would call spiritual-; human-; social-; and intellectual capital.

But there is more to this issue: In the literature in the English language, one often refers to 'human capital', but this is not the same as "mental capital". As is explained later in chapter 4 in the sections; *Capital of mind* and *Human Capital*; 'human capital' is referred to as a rather individual matter, whereas Mental Capital also encompasses public- and historic capital, which has been accumulated, moulded - and perhaps refined - into its contemporary shape, e.g. a people's 'innovative mentality' and ability for co-operation (Cf. List, 1841a, p. 140)

Apart from individual capacities, Mental Capital would therefore include all kinds of public immaterial infrastructure such as language, grammar, morality, work discipline, contract morality, measurement standards, organisational structure, institutions etc. 'Immaterial capital' is therefore a more fitting alternative phrase.

<sup>3</sup> *Idealism* is a philosophical tendency that holds reality to be constructed on the basis of spirit, ideas and spiritual relations, and must be explained only in terms of spirit. The etymological root is the Greek verb 'idein'; to see.

Furthermore, idealism claims that reality as we can know it, is fundamentally mental, mentally constructed, or otherwise immaterial. This means that the moving factor in social and historical change is the individual spirit. Since intention and meaning therefore are fundamental, social- and collective relations and mentality acquire explaining roles. As a more moderate tendency, it emphasises the mental origin and character of phenomena.

<sup>4</sup> *Materialism* is the philosophy tendency that reality is constructed on the basis of matter and material relations, and must be explained only in terms of matter. This means that even thought, will, and feeling, must be explained only in terms of matter. The etymological root is the Latin noun 'mater'; mother. This gives the derivative meaning of 'source'; 'origin'. The Latin noun 'materia'; means; thing, stuff, wood, timber- that which things are made from.

In social philosophy, materialism indicates hedonism, or the belief that pleasure and pain are the determining motives for human action. In social biology, this driving force for action is reduced to 'genes' and even onwards. As a more moderate tendency, it emphasises the material origin and character of phenomena.

of economics: The contrast between the rationalistically oriented axiomatic deductive tradition and the empirically oriented inductive- (statistics) and historical traditions.

The interdisciplinary impressions of my B.A. left me unsatisfied with the way economics was taught and practiced, since not only history, but also culture; institutions, science & innovation, as well as the founding role of the human mind, largely had been left out of economics. Working on my master thesis in 1992 increased this dissatisfaction.

This led a determination to study the historical school further. An article written with Prof. Backhaus on the influence of Friedrich List in 1995, led to closer acquaintance with a writer who suited my demand for a grander economic theory, which also dealt with the holes that my university curriculum had left out; cultural issues in its many shapes; e.g. the empirics of history, reason and innovation, morality and co-operation, institutions and power. Not that these issues have been left out of modern economics entirely, but they have only been dealt with ad-hoc, and in a formal way that is removed from the non-formal reality of such phenomena. It is therefore not realistic.

Furthermore, mainstream textbook economics lacks the rational coherence of List's system, where List explains why progress<sup>5</sup> is furthered by a row of factors, such as freedom, science, industrialisation, urbanisation, transportation, division- and confederation of labour,<sup>9\*6</sup> trade, pragmatic protection and -regulation, and how these factors all join forces and fit together into one coherent system, some better than others. List also offers a larger and spiritual reason to engage in the process of furthering economic growth, although he admittedly is somewhat short also on the definition of progress – which therefore has to be seen in the context of his times.

Searching for a deeper foundation and common denominator in the multifarious issues of List's 'National System', I concluded by focusing on 'Mental Capital'.

## 0.02 Recent interest in List

---

<sup>5</sup> *Progress* is a highly valued concept by List, although poorly defined. Briefly, it refers to improvement in morality and skills. For further discussion on this issue, see the sections; (Ch2): *Believer in progress*; *Progress in Western Culture - Improvement in morality and skills*; and *Progress and development*.

<sup>6</sup> The concept *Confederation of Labour* may briefly be described as an inter-generational 'national teamwork' – which includes both the co-operative aspect of society – as well as the competitive aspect. Nevertheless, List For further discussion on this concept, see especially the sections; (Ch.4): *Confederation of Labour*; but also the sections; (Ch.4): *Science as elevator of civilisation*; *Comments on List's approach to Capital of Mind*; *List's Realism versus British Nominalism*; *Perfecting the balanced harmony of productive powers*; *Mental side of transportation*; and *Communication furthers urbanisation*.

I later (in 2010) realised that this issue had been dealt with before my initial interest, and also had been dealt with in the meantime by other writers, such as Daniel Levi-Faur (Levi-Faur, 1997) and Chris Freeman (*Technological infrastructure and international competitiveness* (Freeman, 1982-2003, a report to the OECD). Freeman has had a critical role in shaping the works on 'National Innovations Systems' (Cf. e.g. OECD, 1997). Freeman writes,

... the central feature of List's doctrine was his belief that economic progress depended on building up the 'mental capital' and productive powers of the nation. (Freeman, 1982-2003, ch. 6, p. 16)

It is my contention that since List based his system on the crucial role of Mental Capital, as opposed to Adam Smith's materialistic conception of capital, List arrived at conclusions regarding e.g. capital and saving, trade regulations, as well as industrial development at large, which were markedly different from that of Smith.

List's view on trade policy has been picked up more recently by e.g. a number of US citizens, who since the 1980s have criticised the effects of free trade and outsourcing for the USA. For instance, one of "Wall Street's big thinkers" (Reuters, 2004, see also Forbes 2005), Chris P. Dialynas<sup>7</sup> article, *Trouble Ahead - Trouble Behind, Restructuring the Global Economy - A New Marshall Plan*. Dialynas hailed List's insights regarding the fundamental reasons for balance of payments problems, also contemporary such,

List's ideas are of great importance today. The global trade imbalances and wealth transfers that concerned List are most prevalent today. (Dialynas, 2004)

Dialynas on this ground called for a change of US trade policies turning away from Adam Smith's utopian ideas, to List's more realistic strategies, thereby preventing that the US loose its edge.

National debt and repayment are to these imbalances closely related issues. This concerns Japan's and USA's financial situation, but also e.g. the European efforts to get e.g. Greece out of its debt crisis. Prof. Jürgen Backhaus in his 2011 lecture in Greece, *Why Greece should be bailed out*, calls for Listian measures,

... in order to build industrial and commercial, short: productive capacity, a system of tax credits and incentive taxation should be tried, since a transfer union should be avoided. (Backhaus, 2011, abstract)

Overlooked by many historians and economists, is the fact that List's first book, *Outlines of an American Political Economy* (List, 1827), was directed precisely at guiding a nation in the same kind of dire straits as

---

<sup>7</sup> Chris P. Dialynas is a Managing Director of the US based PIMCO (Pacific Investment Management Co), the world's largest bond-investment firm.

e.g. Latin-America etc. had a few decades ago and much of the West and Japan suffers today.

After the Napoleonic wars the United States of America, showed many of the same results of lacking competitiveness and of lacking productive capacity: Deficits in trade-, payments-, and revenue, as well as banking- and business crises and social despair. The only sensible way of getting out of national debt is to produce and export. List's whole authorship is a deliberate guide as to how this may be accomplished, by elevating the quality of a nation's labour. List here excels as a profound guide.

List's related view on capital and accordingly on saving, has also been little noticed, but has important implications for the problems in Western countries regarding national debt and lacking growth. List criticised the materialistic conception of capital with the Physiocrats and Adam Smith, which led to undue attention to saving and ignorance of the systemic demands of economic circulation. This criticism was repeated with Edwin Cannan (Cannan, 1921), and rediscovered by Levi-Faur (Levi-Faur, 1997).

List's related criticism of Smith regarding gluts and underconsumption and disruption of economic circulation, has also been little noticed, but are of similar current interest, especially in Western countries. List was here preceded e.g. with Friedrich II of Prussia in his *L'Anti-Machiavel* (Friedrich II, 1740, ch. xvi). It was later taken up by many 'technocrat's' and 'monetary heretics' in the first half of the 19<sup>th</sup> Century, further inspiring economists such as John Hobson, John M. Keynes, Ragnar Frisch and James Meade.

### **0.03 Abstract**

This dissertation is a systematised and thematic study of Friedrich List's economic approach, showing:

- 1) The fundamental importance of immaterial production factors, and
- 2) How 'mental capital' binds a multitude of issues together into a coherent system.

List's system is simple in principle, and yet complex:

The human spirit creates culture which creates wealth – or in more detail:

Mental capital creates innovation, constitutes and reshapes collaboration, which constitutes and reshapes nations and (defines and) creates wealth. Using List's terminology:

- 1) The task of political economy is to contribute to individual and social progress: The goal is elevation of global civilisation by moral and material improvement.

- 2) Mental capital, individual and collective, is the prime source of wealth and constitutes the essence of;

3) The Confederation of Labour, which both constitutes and continuously reshapes the nation, both its civic institutions and the State.

4) The nation is the main vehicle for the individual person's quest for freedom, happiness and wealth.

5) The ultimate confederation of Labour lies in global free trade, making the selfish colonial system as well as navies obsolete.

Ad 2) 'Mental capital' is the founding stone of List's system. It alone can utilise the resources given by nature. Searching for List's inspiration would take us to contemporary German Idealism, and further back into a tradition with roots in Cameralist- and Renaissance statecraft, and the ancient Greeks.

Ad 3) Mental capital is the essence of the intergenerational 'Confederation of Labour': Knowledge, innovation, education, morality, trust, credit, social networks, traditions and institutions. Mental capital is fragile and needs to be wisely nurtured and protected against the gusts of the world markets, payment imbalance and economic crises. Physical capital move and perish less easily.

Ad 4) The Nation delivers collective services that an individual cannot – such as traditions, arts, freedom, security, and major investments. The nation resembles a large company, constituted by the Confederation of Labour.

It can only develop well through a carefully balanced development of all vital sections of agriculture, trade, and industry, and furthermore their efficient interconnection through state of the art institutions, standards, communications, and the establishment of towns.

According to List, this Confederation of Labour constitutes the nation as a market and as a national system of innovation and production, which reaches its furthestmost potential in an urban-industrial civilisation or as List termed it: *The Industrial System*.

List claims that because intangible capital largely was ignored by the English Classical School, it therefore focused on increased division of labour through free trade; on increased accumulation of material capital through austerity and saving; and curtailing population growth. According to List, Adam Smith's materialism led him to gross and fatal generalisations and to misunderstand the nature of capital. He ignored immaterial factors and therefore the roles of stability; - social cohesion; -co-operation; -civil society; - institutions; (such as the nation); and - economic regulation.

Ironically, England was the nation that more than any had used every trick in the book of government intervention to promote industrialisation, and then prevent other nations from doing the same.

## **0.04 Chapters**

The chapters are ordered in the following fashion.



The introduction gives a brief introduction to List's system of ideas, in order to have a frame in which to put the next chapters.

The abstract and an introduction will give short summaries of List's ideas. The abstract focuses more on the logic of List's system.

The first chapter describes his *Life and works*.

Chapter two, *Inspiration and method*, includes a discussion of two basic concepts in List's authorship; freedom and progress. It also deals with List's own description of how he arrived at his ideas and how he describes his major inspirations like Colbert and Napoleon. Finally, there is a discussion of List's method.

Chapter three, *Critic of materialism*, indirectly gives an idea of List's own ideas, by exposing List's criticism against the 'radical' liberalist tradition of free trade, better known as British Classical School.<sup>8</sup> This concerns in particular Adam Smith, but also David Ricardo and Thomas R. Malthus, as well as Jean-Baptiste Say and Thomas Cooper.

Chapter four, *Productive force*, describes List's national system. The chapter endeavours to explain how mental capital constitutes the idealistic basis of List's ideas for entrepreneurship, innovation, trust and morality, and therefore for economic development through legal and regulatory arrangements, as well as innovative communications, which all constitutes the confederation of Labour and consequently the nation.

Chapter five, *Regulation*, discusses the reasons for public intervention, in particular regarding market imperfections, public goods and transactions costs. Furthermore, List's relation to the field of Law and Economics is discussed. Although 'regulation' is an important part of the productive forces, the theme is large and important enough to qualify for a separate treatment and chapter.

Chapter six *Protection and nurture*, discusses protection of the system described in the preceding chapter. This concerns the practical arrangements accordingly necessary to elevate national culture and preserve national sovereignty, while at the same time promoting mutual international benefits. This especially concerns customs unions, as well as international organisations and -agreements.

Chapter seven, *Sovereignty and international power*, deals with List's Realist understanding of the foundations of national sovereignty in an international world, being not only geographical preconditions, but also mental and institutional.

Chapter eight, *Summary of criticism and conclusion*, gives a brief list of List's possible shortcomings, in particular regarding the subject matter of 'Mental Capital'. The conclusion discusses List's criticism against the materialism of the Cosmopolitan School of Adam Smith, as well as List's stress of the immaterial productive forces.

---

<sup>8</sup> Friedrich List also termed this tradition; 'the School', 'the Popular School', 'the Orthodox School' and 'the Cosmopolitan School'.

## **0.05 Title**

List may be placed in the tradition of *German Idealism* around the turn of the 19<sup>th</sup> Century, for instance in the sense that he believes that the moving factor in historical change is the individual's spirit, and that increased freedom, morality, innovation, and will to make a change, is the essence of progress: Morality, insight and determination: Therefore the title of this dissertation is *Friedrich List's Heart, Wit and Will*, with the subtitle *Mental Capital as the Productive Force of Progress*.

## **0.06 Quotations**

The year of publication referred to in the quotations, refers to the first printing. When quotations are taken from eventual later and changed editions, this is mentioned. Whenever a text has been translated into English, this publication is listed and this text is used for quotation.

I have quoted extensively in this dissertation instead of paraphrasing extensively. One reason is that the authors quoted normally express their ideas best themselves; secondly, extensive quotations better allows the reader to check the veracity of claims and also the textual context - without having to waste time and money in acquiring the books themselves and then search for the quotations; and finally, most of the quotations may eventually be skipped for a speedy read, since most of them are preceded with a summary and often a comment.

## **0.07 JEL classification**

B31, B41, H00, O31

## **0.08 Acknowledgments**

I would like to thank the following persons:

Prof. Dr. Dr. Helge Peukert for organising my promotion at the University of Erfurt.

Dr. Gerrit Meier for reading through and commenting an early draft of the dissertation. Any remaining and new errors are of course mine alone.

Dr. Ursula Backhaus, for helping me helping me in practical matters, and keeping in touch with me through these years, and for spurring me on to the final completion.

Prof. Dr. Dr. h. c. Jürgen G. Backhaus Lic. jur., for originally inviting me to Maastricht, for helping me, also in practical matters, for showing patience and keeping in touch with me through these years.

Dir. Lars Gjerde, for his most generous economic support during my first 3 years in Maastricht.

My friends, who somehow did not lose their belief in my project.

My mother and my brother, for their support and patience.

I owe you all my deepest gratitude!

Arno Mong Daastøl

# 1.0 Life and works

## Contents

1.01 Summary	20
1.02 List's background and education	20
1.03 Intellectual Environment	21
1.04 Political and economic struggle	22
1.05 Forced emigration – international learning	25
1.06 Return to Europe	27
1.07 List's later publications and work	29

### 1.01 Summary

Friedrich List was born into a craftsman's family in 1789. He changed profession and was educated as a public accountant. He served in that profession and He took legal studies, and was eventually appointed as Professor of Statecraft in a cultural environment dominated by the German Idealist philosophy. He actively promoted industrialisation and therefore a German customs union. He was elected to the parliament, but due to his promotion of liberal reforms he was imprisoned and immigrated to the USA. He was here active as a farmer; mines- and railroads entrepreneur; publisher; and propagandist for the North American customs union. He returned to Germany as a Consul for the USA, and established himself as a publisher of several journals. Soon he devoted his full time to promote railroads and the further development of the German customs union, until he passed away in 1846.

### 1.02 List's background and education

Daniel Georg Friedrich List was born in 1789, as the son of a respected tanner in the Southwest German town of Reutlingen, shortly south of the capital Stuttgart in the hilly and princely state of Württemberg, Germany.

The ancient trading town of Reutlingen was somewhat exceptional in its liberal democratic tradition of administration, to a large extent based upon the old guilds. Soon after the Napoleonic wars, the former "free imperial town" (subject to the German Empire only and not to local states and kings) of Reutlingen came into conflict with Austria, whose Prince Metternich (1773-1859) since 1809, desired to impose his will upon southern Germany, in the spirit of the Vienna congress.

After a short and uninspiring period in his father's leather business as a tawer - a rather filthy business, List preferred to enter service in

state administration as a municipal scribe (“Stadt- und Amtsschreiber”) in 1804. His practical family background is of some interest, as it may explain why he took a practical interest in improving the lives of his fellow citizens “here and now” - in contrast to Karl Marx’ academic background and his ideas which had a more theoretical and utopian character.

List passed his examinations at the Royal Ministry of Finance in Württemberg in 1809, and took office as a substitute at the treasury office (“Cameralamts-Substitut”) serving in the nearby towns of Wiblingen and Ulm. He was rewarded with a recommendation as “indispensable”. He then became an advisor of finance and accounting (“Finanzrat” and “Rechnungsrat”). From 1811, List studied law, part time, and gave up his position in 1813 in order to concentrate better on his studies. He never sat for the final lawyer’s examination, but instead passed the actuary examination in 1814. He re-entered the administration as an accountant and was promoted to Chief Examiner of Accounts (Ministerial Under-secretary) in 1816, under his mentor, Minister Von Wangenheim. Therefore, it is fair to say that Friedrich List was in essence educated and trained as a Cameralist, a state administrator and accountant. This is what Small and Zielenzieger refers to as a ‘Cameralist of the bureaus’ as opposed to a ‘Cameralist of the books’ (Cf. Small, 1909; and Zielenzieger, 1914)

### **1.03 Intellectual Environment**

The town of Friedrich List’s studies, Tübingen, is the neighbouring town of both his natal town Reutlingen and of Stuttgart, the old administrative town of the State of Württemberg, where List joined the Lower House (Chamber) of the State of Württemberg’s Parliament, as the representative of his hometown Reutlingen.

Several noted thinkers had spent their productive years in Tübingen the past Centuries, such as the great shapers of German and European popular and academic thought, Melanchton (the pre-Leibniz Aristotelian), the astronomer Johannes Kepler.

More important in our context, List’s somewhat older but contemporary inhabitants of Tübingen were well-known leaders of the German Idealist movement, such as the philosopher Friedrich Wilhelm Joseph Schelling (1775-1854), and his student friends: The poet Johann Christian Friedrich Hölderlin (1770-1843),<sup>9</sup> and the philosopher Georg Wilhelm Friedrich Hegel (1770-1831).

Also noteworthy in our context, is the renown Scottish Mercantilist and economist Sir James Denham-Steuart (1712-1780), who lectured in Tübingen a few years before List took residence there and drafted the

---

<sup>9</sup> Hölderlin may have been the source of Hegel’s knowledge of Heraclitus’ ideas of the union of opposites, which Hegel developed into his philosophy of dialectics.

first two books of his *Principles* there in 1759 (Cf. Stuart, 1767). Hegel read Stuart's *Principles* in 1799, but his notes have been lost (Cf. Pridat, 1990).

List's successor at the faculty of political science from 1824 to 1845, was Robert von Mohl (1799-1875), the creator of the concept *Rechtsstaat*.<sup>10</sup> Like Massenbach and List, Mohl lost his position because of his criticism of the authorities. A later successor after List, was Albert Eberhard Friedrich Schäffle (1831-1903).

Already this indicates that List grew up in a region that was dominated by liberal political views and a high regard for learned knowledge. In fact, he sometimes complained that the latter was overdone.

#### **1.04 Political and economic struggle**

In these early years of List's life, already in 1815, he quite notably wrote an anonymous article advocating domestic free trade, export promotion, construction of infrastructure and the establishment of a chamber of commerce in Frankfurt (Cf. List, 1815a).<sup>11</sup> These themes remained close to List's heart.

List soon became an ardent supporter of the political liberal movement in the German idealistic tradition of Cusa, Leibniz and Wolff. As these, he acted against the arbitrariness and inefficiency of the bureaucracy and against the autocratic force of Austria in particular.

One instance is particularly worth mentioning. In 1815 List cooperated with the philosopher Georg Wilhelm Friedrich Hegel, during the reforms of the constitution of the State of Württemberg. During an attack by anti-royalists, Hegel republished his defence of King Wilhelm I of Württemberg, at the request of the republican Friedrich List. This not only shows the early connection between these two champions of related causes, such as German unity and political freedom. This incident also illustrates List's pragmatism, where he as a republican defended a King - who in this case was a supporter of liberal reforms.

---

<sup>10</sup> Meaning 'rule of law state', or 'constitutional state', a concept prepared for by ancient Continental tradition and by the contemporary German Idealist tradition, from Kant to Hegel and onwards. Mohl was also a scholar on the Cameralist tradition, with his work *Political Science according to the Principles of the Constitutional State* (Mohl, 1832). Mohl inspired Japanese post *Meiji* reforms through the lawyer and statesman Kato Hiroyuki, a scholar in German philosophy.

<sup>11</sup> "Vorschläge, Deutschlands künftigen Handel betreffend." (Allgemeiner Anzeiger der Deutschen, 1815, Nr. 209 u. 211): Der anonyme Verfasser fordert: freie Ein- u. Durchfahrt von Rohprodukten, Zölle auf ausländische Fabrikate, Förderung der Ausfuhr, Aufhebung der Zünfte, Ausbau des Verkehrswesens, Gründung von Aktiengesellschaften zum Kanalbau, Aufhebung von Binnenzöllen. Gründung einer Handelskammer in Frankfurt, die Vorschläge an die Bundesversammlung bringt. Erwähnung der Navigationsakte.

His proposals were multifarious, and e.g. in 1815, he suggested a new municipal accounting system (Cf. List, 1815b), a short essay in 1816 advised on improving authorship by setting up prices (Cf. List, 1816), and his 1817 report was based on interviews with emigrants, from the townships of Heilbronn, Weinberg und Neckarsulm, to the United States (Cf. List, 1817a). The latter gave him a detailed impression of problems that haunted ordinary German people to a degree that gave them reason to emigrate.

List put forward numerous practical reports and suggestions for reform of the local inefficient administration and its financial and legal system, some really manifestos for reform, such as his outline for a new municipal accounting system (Cf. Pausch, 1989).

These efforts came to the attention of his superiors and made him the protégé of Wangenheim who had similar ideas and intentions but this activity also gave him enemies, especially within the bureaucracy, to which he became especially vulnerable after the resignation of Wangenheim. The time was not yet ripe for these liberal reforms.

One of List's forerunners in his quest for liberal reforms in Württemberg was the mathematician and military geographer for Friedrich the Great of Prussia, Colonel Christian von Massenbach from Heilbronn in Württemberg. He was the initiator of the military German General staff. Due to his campaign for a liberal parliamentary reform, Massenbach was expelled from Württemberg in 1817, and in 1819 he was imprisoned in Frankfurt a.M. for 14 years. Massenbach might also have inspired List by his advanced theories of strategy and space.<sup>12</sup>

List's reform efforts were to haunt also him politically and financially the rest of his life. He early understood this, and wrote in his offer of marriage to Karoline Neidhard that,

I love my country perhaps more than my own happiness ... My income does not suffice for a very proper support of a family: I will have to put aside. (List, 1818b)<sup>13</sup>

In 1818 Karoline Neidhard (1789-1866) married him still. List also wrote a book on the treatment of marriage within Roman law, *Grundriss des Römischen Rechts* (in English: "Outline of Roman Law"). The date of publication is still not known, but it is probably written in his early years (Cf. List, 1826).

List supported the establishment of a chair in economics at the local and ancient university of Tübingen (Cf. List, 1817b). He was not appointed to this chair, but rather to the full-time chair of political administration ("Staatspraxis") in 1817, although his formal credentials for such a position were lacking. In fact, this chair was created for him

---

<sup>12</sup> I am indebted to Peter Spengler for his reference to the possible connection between List and Massenbach.

<sup>13</sup> The original in German reads; „Ich liebe mein Vaterland vielleicht mehr als mein eigenes Glück [...]. Mein Einkommen reicht nicht nur zu sehr anständiger Unterhaltung einer Familie aus; ich kann noch zurücklegen.“ . (List, 1818b)

personally, and he held this professorial chair of Political Science for one year. As Professor he published a book based on his lectures on political science called *Outline of State Knowledge and Practice in Württemberg* (*Die Staatskunde und Staatspraxis Württembergs im Grundriß, ...*) (Cf. List, 1818a).

List was way too energetic to keep away from life outside academia. List edited *Württembergische Archive* until 1817 (Cf. List, 1817c), and during 1818-19, he was involved in a reform journal called *Friend of the People of Schwaben* (*Volksfreund aus Schwaben*) (Cf. List, 1818-1821), to which he contributed articles on reform subjects.

In 1819, the German Trade Association (*Der Handelsverein..*) founded the *German Industrial and Commercial Magazine* (*Organ für den deutschen Handels- und Gewerbestand*). It was edited and largely written by List who in the columns advocated many reforms.

List argues for the removal of internal German tariffs and the establishment of a common tariff against foreign goods. This aimed at the abolishment of internal impediments to trade in Germany, and for protection against foreign manufactured goods, in other words a typical (State-) Mercantilist programme, promoting a stronger home market and -production. He then engaged himself in the establishment of a new society for trade and manufacturing, *The German Association of Trade and Commerce* (*Deutsche Handels- und Gerwerbeverein*), and became its "consular secretary" in Frankfurt am Main. At a fair in 1819, he authors a petition to the German parliament promoting a German customs union, and gets 5000 signatures (Cf. List, 1819).

In the 1885 edition of the *National System*, the introductory Memoir<sup>14</sup>, has the following text,

It was not until List's articles appeared that any public discussion of these questions had taken place in Germany, and to him certainly belongs the credit of having first awakened any general public interest in them. (Schnitzer, 1851 and quoted in List, 1841a, p. xx,)

His activities provoked his opponents and gave them an excuse to demand his resignation from his Professorial Chair, on the grounds that it was improper for a civil servant to hold political positions and partly because of absenteeism. His opponents were, in particular, Fulda, Prof. of Cameral Sciences in Tübingen, and Prince Metternich, Minister of State in Austria. Among Austria's Ministers, List was branded as a dangerous revolutionary, since he was a peril to Austria's interests in southern Germany.

List withdrew from his professorial chair in 1819, and from now on, his life was completely devoted to political and economic reform in the service of the common good. His financial position was to be, and stay,

---

<sup>14</sup> Abridged from *Friedrich List, ein Vorläufer und ein Opfer für das Vaterland*. (Stuttgart, 1877.) (note in List, 1841a, p. xiii)



accordingly bad most of his life. List travelled extensively on behalf of the Trade Association.

In 1819 the citizens of his hometown Reutlingen elected him their deputy to the state representative assembly of Württemberg, in Stuttgart. He then took part of the fight for a constitution for Württemberg. In 1820 authors a memo to Prince Metternich (Cf. List, 1820), and notably, he met with his adviser, Adam Müller, in Vienna in 1820. He authored another petition in 1821 (Cf. List, 1821a), related to the establishment of a Chamber of Commerce.

### **1.05 Forced emigration – international learning**

These reform activities brought him before the court, like Massenbach in 1817. List defended himself (Cf. List, 1821b), but was tried and convicted for sedition in 1822. He escaped into exile in 1822 to Strasburg, and Mühlhausen, was expelled and moved on to Basel, and then to Paris in 1824. He there met with the economists Gilbert Motier, Francois de Dupin, and with the hero of the American revolutionary wars, General de Lafayette, who later was to become his mentor in the US.

Visiting London in 1824, he met his opponent John Bowring, a prominent English Member of Parliament, journalist, and economist who argued for free trade already in the 1820s. In London he for the first time became familiar with a revolutionary new mode of transport technology; steam-powered locomotives on railways. He was to spend the rest of his life furthering their acceptance and implementation, but already in 1838 he recognised the superiority of electro-magnetic propulsion (Cf. List, 1838, p. 7).

He came back to Stuttgart in 1824, where he was imprisoned for six months for “slander” against government institutions: He was charged with sedition for his opposition to tariff barriers between the German states. In 1825 he was exiled, through the mediation of Johann Friedrich Cotta, the publisher of Friedrich von Schiller’s works. List emigrated with his family to the US, following the advice of Lafayette. In the US he travelled extensively with Lafayette, carrying a passport signed by him, and through him met and became befriended with several leading political figures like the protectionist and Continentalist, President John Quincy Adams, furthermore President James Madison and in 1830 with the to-be-President Andrew Jackson. He met also with leading economists of the American System tradition, especially around Philadelphia; among these were Daniel Raymond, Hezekiah Niles, Henry Clay, and Mathew Carey, with whom he stayed for some time.

In 1825, he settled in Pennsylvania, and unsuccessfully took up farming near Harrisburg. However, the discovery of coal on land that he had acquired near Tamaqua, led to the successful development of a coal mine.

From 1828, he was manager and co-owner for a railroad of some 34 km, which opened in 1831. This was one of the very first railways in the

USA, the Tamaqua - Port Clinton railway in Schuylkill County, Pennsylvania. See his *Reports on the improvement of the Little Schuylkill* (Cf. List, 1829a).

These activities made him wealthy and financially independent for a while. He thereby also gathered practical experience with business and with innovative transportation, which later resulted in books, journals and a myriad of articles on this and related themes.

List was also more successful, also financially, in Reading from 1826, as editor of a German-language newspaper *Readinger Adler* (meaning, Eagle of Reading) (Cf. List, 1826). He also engaged himself in the local industrial society, Pennsylvania Society for the Advancement of Manufactures and Mechanic Arts.

At this time, the former capital (until 1800) of Philadelphia was the second largest city in the US and Pennsylvania was the centre of industrial activity as well as the centre of German settlement, the largest immigration group in the US ever. Accordingly, the newspaper List was editing was of considerable importance. Eventually, he lost much of his American property in a financial crisis, which gained him experience also in this field. Lacking funds, List now requested a position at a university in the US, but was turned down.

List was especially productive in these years. In 1827 List wrote *Proposals, for publishing a work, to be entitled The American Economist* (Cf. List, 1827a). It was never published.

At the suggestion of Charles Ingersoll, a protectionist and the chairman of the above-mentioned Pennsylvania Society, List wrote twelve letters to the Philadelphia newspaper *National Gazette*, one of the most prominent newspapers of the time, published in 1827.

These were then published as *Outlines of American Political Economy* (Cf. List, 1827b),<sup>15</sup> exposing its features and contrasting it with the extreme free-trade *Elements of Political Economy* by the southern secessionist Thomas Cooper. The book was published in 1827 by Samuel Parker in Philadelphia and accompanied by an introduction by a famous hero of the American Revolution, General Lafayette.

His *Outlines* were hailed nationally as a textbook of the American System (of Economics), as opposed to the British System (non-regulated free trade). It was published nationwide in many influential journals and did influence the Congress into passing the "Tariff of Abominations" in 1828. Thereby, List was in part responsible for the introduction of the protectionist US tariff laws of 1828.<sup>16</sup>

The conflict between these two strategies was later to be the core reason behind the US Civil War, where the industrial North favoured protectionism and allied with other developing nations like Russia and Ja-

---

<sup>15</sup> The title first intended was *The American Economist*.

<sup>16</sup> Thereby confirming the Hamiltonian protectionist tradition that later was renewed with Abraham Lincoln and built the framework of the US industry until 1913, whereafter the system was somewhat dismantled.

pan. The agricultural South favoured free trade and allied with the industrial leader, Great Britain.

Some of his many letters and articles the few following years were: *Reports from North America* (Cf. List, 1828a), *Letters to Governor Miles of Virginia* (1828b), *Harrisburg Address* (Cf. List, 1828c), *Remarks on Mr. Cambreleg's Report on the Tariff* (Cf. List, 1830a), and *On a Commercial Treaty between France and the United States* (Cf. List, 1830b).

His letters with Joseph von Baader: *Canals and Railroads in the Free States of America*, were published in *Ausburger Allgemeine Zeitung* (Cf. List, 1827e).

List was to spend the rest of his life furthering the ideas of the American System of Political Economy, as in his *Outlines* .. (Cf. List, 1827b, Letter I and IV). In the First Letter of his *Outlines*... he writes, concerning the first General Convention of Agriculturalist and Manufacturers in the US that,

... I believe it to be a duty of the General Convention of Harrisburg, not only to support the wool growers and wool manufacturers, but to lay the root at the axe of the tree, by declaring the system of Adam Smith to be erroneous - by declaring war against it on the part of the American System - ... (List, 1827b, Letter I)

... the Union can grow powerful only by fostering the manufacturing interest. This, Sir, I think the true American political economy. (List, 1827b, Letter IV)

The policy of the American System concerns much more than the protectionist label usually thrown upon it. Its history in the US goes back to the Massachusetts Bay Colony, and Franklin and Hamilton's efforts to establish an American Republic by engaging the spiritual efforts of the individual citizen, utilising the advantages of modern technology in the interest of the common man as well as of the nation. This was to be done through state initiation and channelling of private investment into public goods activities: education, infrastructure, industry and agriculture. Therefore, as one example, the American System also concerns public banking as opposed to private banking.

List met Andrew Jackson in 1830 and supported him in the presidential election campaign, hoping for an appointment to the Hamburg consulate. The Senate did not confirm this appointment, and Hamburg refused to accept him as a Consul for the USA.

## **1.06 Return to Europe**

List may be described as an American economist, as much as he may be described as a German economist. But although he became an American citizen in 1830, his heart was always with Germany, as indicated above in his letter of proposal to marriage. And in the preface to the *National System* he says that,

In writing this preface I am humbly conscious that much fault may be found with my work; nay, that I myself might even now do much of it better. But my sole encouragement lies in the thought, that nevertheless much will be found in my book that is new and true, and also somewhat that may serve especially to benefit my German fatherland. (List, 1841a, p. xxx-xxxi)

His endeavours for a foreign market for American coal and his plans for railroads in Europe brought List to France in 1830. On his visit to Paris in 1830, he met the German poet Heinrich Heine (in 1831 & 1837), and the revolutionary journalist Ludwig Börne.

List returned to Germany in 1832, and was confirmed as the American Consul to Leipzig in 1833, and served as U.S. consul at Baden, Leipzig, and Stuttgart, although the most powerful man in middle and southern Europe tried to prevent his accreditation. This was Prince Metternich, Austria's Minister of State and host of the 1815 Congress of Vienna.

During 1833-1837, he worked out detailed plans for railroads in Prussia, Hamburg, Braunschweig and Baden and wrote *On a Saxon Railway Network* (Cf. List, 1833), which also was a blueprint for the Leipzig - Dresden railway. In 1835 he wrote a memoir regarding a railway from Mannheim to Basel (Cf. List, 1835). In 1837, he was thoroughly involved in the construction of this first German railroad and one of the first on the European Continent.

He travelled extensively and met with many leading politicians and heads of state like King Anthony of Saxony (1833), the Prussian Minister of Education, King Ludwig I of Bavaria (1841), Crown Prince Maximilian of Bavaria (1842), Russia's Minister of Finance George von Cancrin (1843), Bavaria's Minister of the Interior Prince von Öttingen-Wallerstein (1845), Karl Prince von Leiningen (1845), a half-brother of Queen Victoria of Great Britain. List also met with people in science and the arts - Alexander von Humboldt (1819 and 1834), Klara Wieck-Schumann (1840), in addition to Heine and Börne as mentioned. On his visit to London, just before he died, he met Prince Albert of Great Britain (1846), the free traders Richard Cobden (1846), John Bowring (1846), and John Ramsay MacCulloch, as well as the future Prime Minister Lord Palmerston (1846).

List wrote extensively for several journals such as the Liberalist *Encyklopaedie der Staatswissenschaften* which he initiated (Cf. List, 1834), and Cotta's *Augsburger Allgemeine Zeitung* (Cf. List, 1839). He also established and wrote extensively in *Das Nationalmagazin* (Cf. List, 1834) and the *Eisenbahn-Journal* (Cf. List, 1835).

In 1837 he quit his position as US Consul to Leipzig and left for Paris where he wrote two treatises for the French Academy of Sciences, *The Natural System of Political Economy* (Cf. List, 1837a)<sup>17</sup> and *The World*

---

<sup>17</sup> The sub-title of List's treatise was *Et la patrie, et l'humanité* (meaning in English: "And the fatherland and the human kind"). List's work was rediscovered in 1925 and published two years later in French and German. The ques-

*Moves* (Cf. List, 1837b)<sup>18</sup>. In these two treatises he treated extensively and systematically the protective system, steam power and new transport systems, and their relations to the constitutional and legal system in general. For instance, in the latter, he repeatedly points out not only the need for national unity in policy but also the need to decentralise what can be more efficiently done in this way. This concerns the so-called subsidiarity principle, discussed by Christian Wolff a century before List. The new means of transportation (read: communication) would alleviate this problem of central as opposed to local control, he argues. Today we experience the same phenomenon with the modern form of the telegraph, namely the Internet.

List also discusses the contributions of science, technological progress, industry, trade, and communication, to social and international peace, and to the international promotion of human rights and labour conditions, and how the legal systems can be used as an integrated part of this agenda (Cf. List, 1837b, p. 133 and 151 ff).

### 1.07 List's later publications and work

In 1838 he wrote a longer pamphlet, *Political and Economic Aspects of the German Transport System* (Cf. List, 1838). It was originally printed as a lengthy article in the *Staatslexikon* ("Railroads and Canals, Steamboats and Steam Wagon Transport").

In 1839 he starts his work with the book *The National System*. He publishes *The Nature and Value of a Nation's Forces of Production* (*Das Wesen und der Werth einer nationalen Gewerbsproduktivkraft*) (Cf. List, 1839a), and *The Freedom and Restrictions on Foreign Trade, Illuminated from an Historical Viewpoint* (*Die Freiheit und die Beschränkungen des auswärtigen Handels, aus dem historischen Gesichtspunkt beleuchtet*) (Cf. List, 1839b) and publishes *On the Nature and Value of a National Productive Force* (*Über das Wesen und den Wert einer nationalen Gewerbsproduktivkraft*) (Cf. List, 1839c).

In 1840 he receives an honorary doctorate from the University of Jena, and turns down an offer of a position in French civil service. In 1841, List is exonerated in Württemberg, honoured by the Hungarian Academy of Science, and publishes *The National System of Political Economy* (*Das Nationale System der politischen Oekonomie*) (Cf. List, 1841a). It was an instant success. He also publishes *The German Railroad-system* (*Das deutsche Eisenbahnsystem*) (List 1841c).

---

tion posed by the French Academy of Moral and Economic Sciences was: 'If a country proposes to introduce free trade or to modify its tariff, what factors should be taken into account so as to reconcile in the fairest manner the interests of producers with those of consumers?' No contestator was awarded, but List's work was among the three mentioned as *ouvrages remarquables*.

<sup>18</sup> The subtitle of this treatise was *On the Effects of Steam Power and the New Means of Transportation*. Erroneously this treatise was thought lost, for instance by Henderson (Henderson, 1983).

In 1841, he turned down an offer to become editor of the *Neue Rheinische Zeitung*, after which Karl Marx took the position. He founded and edited the *Zollvereinsblatt* (Cf. List, 1842-1846), and most of the 650 articles of this “*Customs Union Journal*” were written by List.

List publishes in 1842 his *Agricultural constitution, small business and emigration* (Cf. List, 1842), which is a layout for necessary legal reforms in agriculture. A matter of which he had spoken on in details in Philadelphia in 1828 (Cf. List, 1828c).

In 1843 List founds his *Customs Union Journal* (*‘Zollvereinsblatt’*) (Cf. List, 1843-1846), and meets with the Crown Prince Maximilian von Bayern. In 1844 he makes several trips to Vienna and Hungary, and writes *On the German Railroad Question* (*‘Zur deutschen Eisenbahnfrage’*) (Cf. List, 1844a), and *On the Connections of German Agriculture to Industry and Trade* (*‘Über die Beziehungen der Landwirtschaft zur Industrie und zum Handel’*) (Cf. List, 1844b).

In 1845 he writes *On the National Economic Reform of the Kingdom of Hungary* (*‘Über die national-ökonomische Reform des Königreichs Ungarn’*), an economic plan built around massive construction of a railway network (Cf. List, 1845). Prince Öttingen-Wallerstein and Karl Fürst von Leiningen, a half-brother of Queen Victoria of Great Britain, proposes that List go to London.

In 1846 he writes *The Political-Economic National Unity of the Germans* (*‘Die politisch-nationalökonomische Nationaleinheit der Deutschen’*) (Cf. List, 1846b) which includes the so-called *Factory Bill manuscript* (Cf. List, 1846a).

During his stay in London, he again meets with John Bowring, and with John Ramsay MacCulloch, leader of the Ricardian School in economics. He also writes the memorandum *On the Value and Conditions of an Alliance between Great Britain and Germany* (Cf. List, 1846c). List here suggests that England can only defend her Empire by letting Germany develop under the leadership of Prussia, and letting her build a railroad from Berlin to Bombay in India. The proposal is presented to the governments of England and Prussia, but is turned down by Lord Palmerston and Sir Robert Peel.

During his 3 months’ stay in London, ill health eventually overtakes him. List returns to Augsburg, travelled to Munich and then to Kufstein, Austria, and on the 30th of November 1846, he brings his life to an end by his own hand in Kufstein, allegedly in order not to trouble his family with his illness. The King of Prussia had sent for List, in order to have him work in his administration, but it was too late for List to receive this invitation.

## 2.0 Inspiration and method

### Contents

2.01 Summary	31
2.02 The moral base for industrialisation and urbanisation	32
2.03 List - a practical Idealist	33
2.04 The core of List's ideas: Freedom	35
2.05 Freedom in the German tradition	36
2.06 Progress in Western Culture	40
2.07 Progress and development	42
2.08 Believer in progress	43
2.09 List's partial conversion from 'free trade' – according to List	47
2.10 The Mercantile- and the Manufacturing System	50
2.11 Colbert's legacy	51
2.12 Napoleon's legacy	54
2.13 The American System	56
2.14 The Industrial System - and national unity	62
2.15 Economic Nationalism	64
2.16 Theory and practice	67
2.17 Comparative- and historical method	67
2.18 Realist and Idealist Methods	69
a) Descriptive versus normative - Knowledge versus ethics	69
b) Empirical Idealism	71
2.19 The rational, materialist, and analytical method	72
a) Sense data and measurement	74
b) Measurement and egotism	75
2.20 Reductionism	77
2.21 English Nominalism versus List's Realism	81
a) English Nominalism	81
b) Social Nominalism	82
c) Nominalism in Economics	82
2.22 Methodological individualism and instrumentalism	85

### 2.01 Summary

Friedrich List early on experienced that life could be tough for many people, and he devoted himself to come to their aid. His family's craft was tanning, a dirty business. As a public clerk he experienced the sorry state of the country, which pushed tens of tens of thousands to emigrate. He also experienced the sorry state of public affairs, unable to help people in practice, dominated as it was by absolutism and corruption.

He took a keen interest in economic affairs, and at first was impressed the liberal trade theories of Adam Smith and Jean-Baptiste Say, as was normal in Germany at the turn of the 19<sup>th</sup> Century and after. The contemporary devotion to Cosmopolitan ideas and freedom

from political absolutism and from theoretical and religious dogma made a lasting impression on List.

Nevertheless, the sorry practical results for Germany of the dissolution of Napoleon's *Continental System*, made him change his mind and promote temporary trade protection and a German customs union.

His studies in the economic and cultural history of Europe, deepened his new conviction, and he was impressed by the partial success of the city states of Venice, the Hanse, and the Dutch. What impressed him more, were the partial success of France, and the full success of England as a liberal and urban-industrialised nation. The progressing success of the *American System* that List witnessed with his own eyes convinced him further of the value of a pragmatic and empirically based strategy. He keenly noted how American lack of manufacturing led to financial imbalances and crises. He furthermore noted the destructive effects of this instability, and the need for protection to stabilise home markets and nurture feeble but promising industries to correct trade- and payment imbalances. In America he also became aware of the revolutionary potential of modern communications.

As a young man he was influenced by theories, but soon practical experience took the leading role and historical reading served as supplement. Theories then served List to explain the observable real world. Nevertheless, the liberal and Idealist ideas that impressed the mind of his youth never let go.

List's method came to be practical, learning from his own experience and then from historical experience. He intuitively compared the results of various economic policies as any practical person would do. He deviates thoroughly from contemporary economists abroad by regarding immaterial factors as primary and determinant in economic development. The reason was most likely that List had been impressed by contemporary Idealist philosophy, entrenched in German popular thought. There are many scholarly variants of Idealism, but in popular thought the essence is a belief in human capability and that culture matters for economic progress.

## **2.02 The moral base for industrialisation and urbanisation**

Most of those who know a little of List, know that he promoted German unification and therefore promoted practical integration of Germany through the construction of a network of railroads, and German customs union, in order to build a nation strong enough to withstand foreign pressure and violations.

Some also know that his plans went further and aimed at the similar integration of Europe and eventually the world through e.g. international trade agreements and permanent international trade associations, and that he more fundamentally was a modernist and promoted industrialisation and urbanisation - all in order to promote stability, welfare and freedom for the citizens.



Few economists, however, reflect on the deeper spiritual reasons embedded in List's system.

In order to industrialize, any given government would need to develop consciously the country's infrastructure in all ideal and material aspects: its educative, communicative and administrative system, including the legal system, which was indeed to have the pivotal role.

List's eagerness to promote<sup>19</sup> through regulation<sup>20</sup> general and individual freedom<sup>21</sup> of thought and action, was the major reason why he was so eager to industrialise<sup>22</sup> and urbanise.<sup>23</sup> And high morality and skill would require general welfare,<sup>24</sup> and vice versa, industrialisation makes precisely this possible.<sup>25</sup>

In fact his reasons for promoting freedom, may have been quite philosophical if not even religious, apart from being a reaction to the personal persecution he experienced. List often points to the positive effects of religion, but likewise to the positive effects of reason and religious freedom, as opposed to doctrinaire religion.<sup>26</sup>

## 2.03 List - a practical Idealist

---

<sup>19</sup> The brief quotations following in the following footnotes are extracts of larger quotations that have been used elsewhere in this dissertation.

<sup>20</sup> "Every law, every public regulation has a strengthening or weakening effect on production or on consumption or on the productive forces." (List, 1841a, p. 307).

<sup>21</sup> "... liberty and civilisation have everywhere and at all times emanated from towns..." (List, 1841a, p. 204)

"The spirit of enterprise, economic progress, technical knowledge, and artistic skill develops only in countries enriched by political and religious freedom." (List, 1837a, p. 164)

"... restriction is only the means, and freedom is the end" (List, 1841b, *Introduction*, in Hirst, 1909, p. 292)

<sup>22</sup> "Manufactories and manufactures are the mothers and children of municipal liberty, of intelligence, of the arts and sciences, of internal and external commerce, of navigation and improvements in transport, of civilisation and political power." (List, 1841a, p. 140)

<sup>23</sup> "... liberty and civilisation have everywhere and at all times emanated from towns..." (List, 1841a, p. 204)

<sup>24</sup> "It is essential that the workers of a country which is becoming industrialised should be well paid and well fed." (List, 1837a, pp. 120-121)

<sup>25</sup> "... in flourishing manufacturing States the workman, ... accomplishes a far larger day's work ..." List, 1841a, pp. 202-203)

"Such people are now able to command higher salaries and wages than was formerly possible." (List, 1837a, pp. 66-67)

<sup>26</sup> "The people must have high moral and religious standards so that superstition, prejudice and vice can be rooted out." (List, 1837a, p. 185)

"... the great wealth of England ... . The people's innate love of liberty and of justice, the energy, the religious and moral character of the people, have a share in it." (List, 1841a, p. 49)

An idealistic spirit runs through all writings of List, in the moral sense (as well as in the philosophical sense). He praises the traditional values of community, honesty, trust, diligence, perseverance, thoroughness, precision, and not least the liberal value of individual will and power, as well as the common will to progress towards these values.

This as opposed to ‘the dismal science’ of the Cosmopolitical School, which forgot the early refinements of Bernard Mandeville and Adam Smith etc., and came to hold material egotism and sensualism to be the guiding stars for investigations into economic relations.<sup>27</sup>

The Idealists, however, saw the logical social result of a materialist and individualist approach, as social implosion and -self-destruction.<sup>28</sup> Nevertheless, we should not be misled into believing that the Idealists forgot the daily life of the ordinary Man. As in the Idealistic Renaissance spirit, quite the opposite was the case. This is evident e.g. in Fichte’s *The Closed Commercial State*, where he suggests practical remedies, such as a national trade policy and paper money (Fichte, 1800, e.g. p. 47) and in his *The Vocation of Man*, where he claims that the human vocation lies outside himself and argues that scholars and statesmen have a public duty for national education.<sup>29</sup>

Nevertheless, as we shall see, he also saw them as the prime instruments in elevating agriculture and the rural districts, thereby establishing a balanced development. In this way, industrialisation and urbanisation served the spiritual goal both directly through their “inherent” creativity and indirectly by providing the material basis for both creativity and morality. Industrialisation and urbanisation were therefore means to develop the spiritual characteristics of Man, by offering practical possibilities for the creation, implementation and exchange of ideas, including morality.<sup>30</sup>

In this same way, money as a means of exchange may certainly be said to fill the same spiritual function, by making division and co-operation of labour possible so that everybody may work with their speciality, and simultaneously work for everybody else. In this light, it is evident that monetary institutions also may be arranged in counter-productive ways, making other roles of money counter the co-operative function, such as hoarding and narrow-minded speculation, which both may disrupt regular economic flows.

---

<sup>27</sup> Cf. Schumpeter, 1912, p. 87; and Windelband, 1893, pp. 523-514. For quotations, see this section below, and the section; *List’s Realism versus British Nominalism*.

<sup>28</sup> Cf. e.g. Hegel, 1936, p. 263; and Fichte, 1806, *Dreizehnte Rede* (‘Thirteenth Address’), § 204.

<sup>29</sup> Cf. Fichte, 1799, e.g. Book I, section I; and Book III, section II.

<sup>30</sup> Cf. e.g. the discussion of communication in List, 1837b, Ch. 1.

## 2.04 The core of List's ideas: Freedom<sup>31</sup>

List promotes progress because it will lead to freedom, for the nation and thus for the individual. One example is his warning against debt bondage as a consequence of lacking productivity.<sup>32</sup> Conversely, he promoted freedom because it led to progress; freedom and progress constitute an inseparable pair of Siamese twins (Cf. List, 1837a, p. 153).

In his *National System* ... List describes how England benefitted from her freedoms and stability; and the lack of freedom elsewhere: Competent immigrants brought England to flourish,

Most conspicuous was the advantage accruing to the English manufacturing interest during the Continental wars, ... Great, however, as have been the advantages heretofore mentioned, they have been greatly surpassed in their effect by those which England derived from immigrations attracted by her political, religious, and geographical conditions. From Spain and Portugal came persecuted Jews; from the Hanse Towns, and from Venice in her decline, merchants who brought with them their ships, their knowledge of business, their capital, and their spirit of enterprise. Still more important were the immigrations of capital and of manufacturers in consequence of the Reformation and the religious persecutions in Spain, Portugal, France, Belgium, Germany, and Italy; as also of merchants and manufacturers from Holland ... (List, 1841a, pp.55-56)

List points out how political commotion, wars, insecurity and lack of freedom elsewhere brought England beneficial immigration of capital and talents,

Every political movement, every war upon the Continent, brought England vast accessions of fresh capital and talents, so long as she possessed the privileges of freedom, the right of asylum, internal tranquillity and peace, the protection of the law and general well-being. So more recently did the French Revolution and the wars of the Empire; and so did the political commotions, the revolutionary and reactionary movements and the wars in Spain, in Mexico, and in South America By means of her Patent Laws, England long monopolised the inventive genius of every nation. (List, 1841a, p. 56)

Throughout his life, List propagated ideas which had followed him from his youth. They were outlined already in 1816: Political freedom, political unification and economic development, supplemented with railroad construction and protection of manufacture, as some instru-

---

<sup>31</sup> See also the discussion of the relations between 'Freedom' and 'Civil Society' in the section *Conservative liking for Civil Society*, in chapter 5.

<sup>32</sup> For a deeper discussion of this, see e.g. chapter 4: Especially the subsections; *Industrialisation fosters freedom - a humane civilisation* and *Urbanisation furthers communication, innovation and freedom*.

ments among many, all in the tradition of the potential Harmony of Interests.

Although the goals of his efforts were laid out early, he spent many years in finding the tools that would help achieve those goals. The most important tool was the (mental) recognition of the productive forces behind progress, and then use of the regulatory system to promote progress in practice.

He named his system accordingly, *the system of productive forces*, *the manufacturing system*, and *the industrial system*, as opposed to Mercantilism and to British Liberalism (which he termed the theory of exchange values or the Cosmopolitan School). To understand List, it is therefore crucial to understand what he saw as the most important productive forces.

The core of List's ideas is the immaterial production factors, and accordingly the resulting confederation of labour into a nation, and eventually the world. We may also see and denote the immaterial productive forces as "culture", which determines trust; work ethics; contract ethics; administration; communication; innovation; etc. It is noteworthy that in today's world, the term "culture" often takes on 'collective' connotations, which would miss List's (Christian-Idealistic) focus on the importance of the single individual.

## 2.05 Freedom in the German tradition

Friedrich List's emphasis on freedom demonstrates in the economic field, a direct parallel and result of similar ideas in the German cultural life dominated by Idealism in e.g. philosophy. To a large extent, the modern German philosophical quest has been to unite order, freedom and creativity. Freedom is particularly seen as freedom of the mind, promoting creativity.

In *Germany's Balanced Development: The Real Wealth of a Nation*, Kaevan Gazdar starts the fifth chapter (Gazdar, 1998, p. 141), with a quotation that indicates the Lutheran tradition of commitment to the ethics of work – as benevolent prayer, or compassion in practice,<sup>33</sup>

Men are born to work, just as the birds are born to fly.  
- Martin Luther

In the chapter mentioned above, *The Cultural Roots of Order and Commitment*, Gazdar continues by giving a description of what he describes as Germany's most important revolutionary, Martin Luther.

Germany has often been characterized as a country lacking a revolution: a drastic change of the old order as in the French and American revolutions or a more evolutionary change as in England's Glorious Revolution. In ac-

---

<sup>33</sup> This compassion follows logically from the division of labour, which makes each individual a worker for the other.

tual fact, Germany's religious Reformation was less spectacular but more profound. Its great Reformer, Martin Luther, founded a work ethic that the sentence quoted above sums up. (Gazdar, 1998, p. 141)

Gazdar then describes the strong religious legitimation that Luther gave to individual freedom,

Luther's profound importance for German history lies in his fateful distinction between the power of the state and the freedom of the soul. "The laws of worldly rule do not cover more than bodies, properties, and other worldly things. God will not tolerate anyone other than himself to rule over the soul," he observed in his tract on the "Legitimation of Worldly Authority," published in 1523. He thus founded two worlds: that of the outside and of the inside. The inner world of the soul--Innerlichkeit--is the key to German cultural identity.

Worldly authority should not dictate the life of the soul. Conversely, the reformer calls on believers to accept and support worldly power - and if necessary to suffer injustice without actively resisting. (Gazdar, 1998, p. 141)

Luther's translation of the Bible into German was also a huge contribution to individual freedom through democratisation of reading and writing and thereby knowledge. This had vast economic consequences.

This commitment to individual freedom was continued e.g. with Kant, Hegel, and Steiner: In his essay, *What is Enlightenment*, the philosopher Immanuel Kant claims that the most profound revolution is internal, and propelled by political freedom,

Enlightenment is man's emergence from his self-incurred immaturity. Immaturity is the incapacity to use one's intelligence without the guidance of another. ... The motto of enlightenment is therefore: Sapere aude! Have courage to use your own understanding!

...

A revolution may well put an end to autocratic despotism and to rapacious or power-seeking oppression, but it will never produce a true reform in ways of thinking. Instead, new prejudices, like the ones they replaced, will serve as a leash to control the great unthinking mass.

For enlightenment of this kind, all that is needed is freedom. And the freedom in question is the most innocuous form of all freedom to make public use of one's reason in all matters. (Kant, 1784, § 1 and 4)

And,

There is only one Innate Right, the Birthright of Freedom. (Kant, 1790, F 2, B 2)

The most renowned German philosopher after Kant continues in the same direction in his "Philosophy of History", hailing the ideal of individual "Spiritual Freedom". After describing the Oriental, Greek and Roman worlds, Georg Wilhelm Friedrich Hegel deals with "The German World". He starts this chapter by writing that,

The German Spirit is the Spirit of the new World. Its aim is the realization of absolute Truth as the unlimited self-determination of Freedom - .... The destiny of the German peoples is, to be the bearers of the Christian principle. The principle of Spiritual Freedom - ... (Hegel, ch. IV, 1837; 2001, p. 358)

Ernst Cassirer comments in his *The Logic of the Humanities*, that Hegel regarded the conception of freedom with Kant and Fichte purely as an impotent ideal,

Hegel's philosophy of history sees in freedom the truly great theme of world history and it defines the latter as "progress in the consciousness of freedom."... Hegel demands that philosophy do more than merely assert this thesis, that it proves it. And he insists that it can be proved only by means of the dialectic method, through the logical necessity inherent in this method. According to him, Kant and Fichte were unable to furnish proof of this thesis regarding the freedom of the mind. For them, freedom remains simply an ideal which, left as such, they condemned to the "impotence of the mere ought. (Cassirer, 1961, pp. 29-30)

In any case, the philosopher Rudolf Steiner sought to establish freedom in the practical world, and formulates a foundation already in his dissertation *The Philosophy of Freedom* (Steiner, 1894). In the practical world, he is preoccupied with 'The Social Problem' in Capitalism, from an Idealistic point of view. He regards the basic problem to be spiritual, and as much a problem for each and every individual as much as a social problem. Steiner wishes to cure the social ills of Capitalism whilst retaining its creativity, and liberate creativity further - from commercial and governmental abuse. He argues that true individual freedom is realised not in consumption but in creative production, i.e. work. So in this certain sense work liberates ("Arbeit macht frei")<sup>34</sup> and as a consequence; there is no conflict between individual freedom and the community as in traditional (Materialist) Liberal thought. In the Preface of his book *Die Kernpunkte der Sozialen Frage* ('The Core Points in the Social Question'), Steiner writes,

This book must assume the unpopular task of showing that the chaotic condition of our public life derives from the dependence of spiritual life on the political state and economic interests. It must also show that the liberation of spiritual life and culture from this dependence constitutes an important element of the burning social question. (Steiner, 1919, p. 12)

---

<sup>34</sup> At the same time work is directed to satisfy the needs of the other through a division of labour, and depending on the system of reward; or distribution, this is compassion in practice. And according to Steiner, the task is therefore to organise society to allow for the greatest possible creative freedom in economic life, and just rewards. This is done by bringing production under the control of self-governing "economic associations" or charities, and by dissolving the bond between production and distribution, between work and reward, thereby ending wage labour (Cf. Steiner, 1919, e.g. pp. 18 and 51).

Arguing against the ideas of the 'unitary state', and for educational, scientific and spiritual independence and freedom, Steiner says,

There is only one possible healthy form of development for spiritual life: what it produces shall be the result of its own impulses and a relationship of mutual understanding shall exist between itself and the recipients of its achievements. (The development of the individual abilities present in society is connected to the development of spiritual life by countless fine threads.)

The conditions described here for the healthy development of spiritual-cultural life are not recognized today because powers of observation have been clouded by the fusion of a large part of this life with the political state. This fusion has come about in the course of the past centuries and we have grown accustomed to it. There is talk, of course, of 'scientific and educational freedom'. It is taken for granted however, that the political state should administer the 'free science' and the 'free education'. It is not understood that in this way the state makes spiritual life dependent on state requirements. People think that the state can provide the educational facilities and that the teachers who occupy them can develop culture and spiritual life 'freely' in them. This opinion ignores how closely related the *content* of spiritual life is to the innermost essence of the human being in which it is developing, and how this development can only be free when it is introduced into the social organism through the impulses which originate in spiritual life itself, and through no others. (Steiner, 1919, pp. 77-78)

Steiner argues that the Social Democrats have taken over the illiberal ideas of the old ruling class, and that these ideas of the 'unitary state' will destroy spiritual freedom (and hence the creativity) the arts and sciences. Regarding the Marxist of his day, he says,

He has noticed how certain aspects of human thought are determined by state requirements which correspond to the interests of the ruling classes. The thinking proletarian saw therein a reflection of material interests as well as a battle of conflicting interests. This created the feeling that all spiritual life is ideology, a reflection of economic organization. This desolating view of human spiritual life ceases when the feeling can arise that in the spiritual sphere a self-containing reality, transcending the material, is at work. It is impossible for such a feeling to arise when spiritual life is not freely self-developing and administering within the social organism. ... Art, science, philosophical world-views, and all that goes with them, need just such an independent position in human society, for in spiritual life everything is interrelated. The freedom of one cannot flourish without the freedom of the other. Although the content of mathematics and physics cannot be directly influenced by state requirements, what develops from them, what people think of their value, what effects their cultivation can have on the rest of spiritual life, and much more, is conditioned by these requirements when the state administers branches of spiritual life. It is very different if a teacher of the lowest school grades follows the impulses of the state or if he receives these impulses from a spiritual life which is self-contained. The Social Democrats have merely inherited the habits of thought and the customs of the ruling classes in this respect. Their ideal is to include spiritual life in social institutions which are built upon economic principles. If

they succeed in reaching their goal, they will only have continued along the path of spiritual depreciation. (Steiner, 1919, pp. 77-78)

Regarding Friedrich List, the anti-unitary ideas of Rudolf Steiner are principally present in the shape of a quest for freedom in all social spheres.

## 2.06 Progress in Western Culture

- Improvement in morality and skills

List believes in the good of progress in material and immaterial culture to such a degree that he takes it as a given goal. Apparently he sees no reason to justify progress as a goal, and he does not. To understand List's emphasis on *progress*, we may benefit from having a look at the traditional use of the concept.

Belief in progress is not 'given by nature', since it is just one of many possible and actual world views. As opposed to the Western dissatisfaction with the present and high valuation of change and progress, Australian Aborigines believe in preserving the perfect present and have no words for 'time', 'history', 'future' or 'progress' as implying a different state and situation.<sup>35</sup> Expressed in ideal types the difference is this: Whereas the daily task for the individual in traditional societies is to confirm the collectively given, the task in modern societies is to negate the given.

---

<sup>35</sup> Are these traditional cultures therefore primitive? The Australian Aborigines have survived in extremely harsh environments for 55 000 years, and proves that these cultures are sustainable. Their system of family relationships with more than 100 concepts is by far the most complex in the world. Their mythology with thousands of nature spirits is also complex and penetrates their daily life. Here, human beings are caretakers of nature in a mutually beneficial symbiosis. All human individuals live in a parallel dreamworld before and after earthly life, and communication with the forefathers guides daily life. Their closely related social codes of behaviour are correspondingly intricate. Similar perceptions of time, nature, mythology, and daily life can be found for instance with tribes in western Amazonas, Brazil.

The culture of these tribes is not primitive in the sense of being simple. They just happen to have a different understanding of what the world is and therefore carry different values. Their ontology is different, and their individual and social goals and evaluations are adjusted to this. Their material technology can also be complex and sophisticated, such as the making of a multi-material, multilayer and "sandwiched" hunting bow in the Amazon River delta, a highly impressive work of technical insight and handicraft. Their culture is different, but not primitive in the sense of being simple. Their culture is rather traditional and is therefore primitive in the sense of being first, as in the Latin "primus", since it has not changed (for a long time). Their focus is on conservation rather than change, as in modern societies.



In traditional societies, the satisfied and social individual seeks to maintain society's repetitious path, whereas in modern societies the dissatisfied and lonely individual seeks to change society's and history's repetitious path.

With List's strong emphasis on progress and synonymous terms like advancement, improvement and betterment, he belongs to an ancient tradition in Western thought that basically values change, deeming the present as imperfect. In List's contemporary Germany belief in progress had taken a turn that valued progress on immaterial areas especially much, such as individual freedom and morality (Cf. Kant, 1784 and 1790, F 2, B 2).

A scholar in the study of the concept of progress, the sociologist Robert Alexander Nisbet writes,

For two Centuries the dominant philosophy in Western Europe had been progressive. There were exceptions, ... But ... these occasional doubts are negligible. (Nisbet, 1966, p. 266)

Nisbet later elaborated further on this problem in his book *Social Change and History: Aspects of the Western Theory of Development* (Nisbet, 1969), and wrote in 1980 in his *History of the Idea of Progress* that,

No single idea has been more important than...the Idea of Progress in Western civilization for three thousand years. (Nisbet, 1980, p. 4)

In Nisbet's article *The Idea of Progress* he asks for the content of this concept,

The essence of the Western idea of progress can be simply stated: mankind has advanced in the past, is now advancing, and may be expected to continue advancing in the future. But what, it will be asked, does "advance" mean? (Nisbet, 1979)

Nisbet defines five "crucial premises" of Idea of Progress:

1. Value of the past
2. Nobility of Western civilization
3. Worth of economic/technological growth
4. Faith in reason and scientific/scholarly knowledge obtained through reason
5. Intrinsic importance and worth of life on earth.

We shall not delve too long on this issue, but since "progress" is the founding stone of all Western economic growth- and development theory<sup>36</sup> as a road to "modernity", we can hardly escape dealing with the is-

---

<sup>36</sup> "Progress" also was a core of all the political ideologies from the 17<sup>th</sup> to the 21<sup>th</sup> Centuries, such as Mercantilism, Liberalism, and (national and interna-

sue. The word “progress” is only secondarily derived from the Latin word *progressus*, meaning “advance”. “Modernity”<sup>37</sup> implies a renunciation of the past, and therefore indirectly “progress”.

For our purpose it is interesting to note that the Greek Stoics<sup>38</sup> used the original term *prokoptein*<sup>39</sup> to denote improvement in morality and skills. This usage which focused on personal attributes became the normal interpretation of the term for more than one millennium within Christian Europe.

Social progress indicates dynamism and is derived from change over time. Theories of change that strive to introduce mental order into the sensually perceived chaos, can be *cyclical*, as in ancient societies like with the Stoics in Greece. Such mental efforts can also lead to *linear* theories of progress or *dialectical* theories, as with Hegel and Marx. The modern Western conception is linear.

## 2.07 Progress and development

Let us have a look at a core concept in economics, namely “development”, which will bring us closer to the core of List’s project. List has been characterised as,

... a prophet of the ambitions of all underdeveloped nations. (Laue, 1963, p. 57)

Who has the legitimate authority to define (the content of) progress and development for others? This is often put forward as a reason that industrialised countries should not tell less industrialised countries that they lack something and therefore are of less value, somehow. Although this may be a good point, it is still an extremely superficial point of view, if deeper and more principal matters are not reflected upon

Development is by itself a relatively empty concept, and does not mean much more than change, pure and simple. It may be twisted into any shape and content we might prefer. What therefore must be em-

---

tional) Socialism.

<sup>37</sup> The term “modern” is derived from Latin *modernus*, with its roots in *modo*, meaning “just now”. It was used in the fifth century, distinguishing the Christian era from the Pagan era, then in the seventeenth-century, debating whether Modern culture was superior to Classical culture, etc.

<sup>38</sup> To the Stoics, *prokoptein* means approaching the divine state of the Sage (Sophos), a Stoic wise man who's happiness (eudaimonia) is based entirely on personal virtue, unaffected by circumstances. According to Plato (in his *Symposium*, the Sage had the wisdom the philosopher was searching for. (Plato, 360 BC).

<sup>39</sup> The further origin of *progress* is disputed but most scholars agree that it may be derived from *prokoptein*, or *prokope*, a Greek word that literally means to cut away the trees and the undergrowth and remove obstacles from a road, making travel easier.

phasised and questioned is the goal of development, the deliberate content of development that we decide upon. The concept of 'progress', however, has more meaning since it implies advance, perfection towards a goal. This was also the concept that List preferred.

Furthermore, the methods to get there are called into question, and thereby the ethics of action. Thus, we enter the philosophical and religious arenas. These questions of goal and method can neither be decided by social scientists as such, nor by any other scientist - in a more proper understanding of the word. This concerns the Image of Man, the meaning of our short and limited life on earth. In Germany at his time the philosophical school of so-called German Idealism was dominant to a degree we can hardly imagine today. Respect for this tradition was grand among the German peoples and especially so with German academicians and economists who were far more philosophically inclined than today.

The question that must be asked was: What is Man, and do we want her to be? The answer would have to be somewhere between Man as spirit and as matter- situated between God and Animal, although admittedly many animals share a considerable amount of spirit.

The answer would have dire consequences for Man's individual freedom since the image and goal, Man as Animal, would leave out individual freedom and instead let collective biological instincts dominate - in other words focus on consumption. On the other hand, the goal: Man as God, pure spirit or reason, would direct attention to the potential of in principle limitless creativity, i.e. individual freedom - in other words focus on production.

We notice at once the contrast to British Utilitarianism (e.g. J. Bentham, J.S. Mill) where the concept of freedom is based in practical action.

## **2.08 Believer in progress**

Friedrich List is a true believer in progress, and that Man can change immaterial and material conditions for the better. This is a deep rooted concept in Western thought, permeating Christianity, and perhaps Protestantism exceptionally so<sup>40</sup>

What did List mean by progress? He does not seem to define the concept, but uses it in connection with advance, improvements and refinements in morality, intellect and matter. It can be assumed from the quotations below that List is a firm believer in progress and the likes: Growth, betterment and advancement, besides enlightenment, civilisation, modernity and freedom.

List's lacking discussion of the issue may have roots in List's contemporary society, which in many respects differs significantly from the

---

<sup>40</sup> Cf. e.g. Houston, 1988, p. 35; and Windelband, 1893, p. 427, see quotation in the section *Perfecting the State*, in chapter 5.

relative opulence; indolence; and value-relativity of modern industrial nations today (or at least until recently, before the consequences of the crisis of 2007).

Within a culture permeated with Christian devotion, as in List's time, it was most likely seen as superfluous even to question progress in morality and civilisation as a goal. In an age of physical toil, incurable illnesses, and short life-spans, it was most likely seen as superfluous to question technological progress as a goal. In an age of material want, it was most likely seen as superfluous to question material progress as a goal. Furthermore, material progress was seen also by List as a precondition for cultural progress.

By promoting a progressive state and a progressive nation (Cf. List, 1837a, p. 44 and List, 1841a, *Introduction*, in Hirst, 1909, pp. 287-288), List makes it clear that he wants progress to be a continuous and ongoing process with no end, reaching ever higher levels.

In the texts List wrote himself in English (List, 1827b) he uses the world progress, and in French likewise (List, 1837a). In German (e.g. List, 1841a,) he uses the word "Fortschritt", which literary translated means 'forward step', aka. to 'step forward', in the sense of advancement and make headway. In the translations into UK English and US English, the German word "Fortschritt" is translated as the English word 'progress'.

His writings are flooded with evidence of the fundamental role that progress plays in his view of life and the world, and therefore in his theories. I will use a few quotations to illustrate this, but will first mention that he uses the term 'progress' more than four times more often, after returning to Europe from his stay in America, even when adjusting for the length of the books:<sup>41</sup>

*Outlines* (1827): progress: 6; advance: 26; improve 28

*Natural System* (1837): progress: 89; advance: 68; improve 45

*National System* (1841): progress: 136; advance: 112; improve 107

The quotations below have been structurally arranged according to themes (my emphasis, with bold letters). The quotations have not been chosen to give a representative resume of List's system, but simply to illustrate some of his uses of the concept of progress.

List sees progress in civilisation and material circumstances as praiseworthy, and regards the standards of education, morality and political institutions as well as manufacturing as integral parts of this development.

## Industry and technology as culture

---

<sup>41</sup> *The National System* is about 80 % longer than *The Natural System* and four times longer than *Outlines*.

German industry, ... made admirable progress ... (List, 1827b, p. 173)

When the highest degree of progress in navigation and maritime power has been reached, a new era will set in, no doubt; ... (List, 1841a, p. 45)

Finally, a nation should not regard the progress of industries from a purely economic point of view. Manufactures become a very important part of the nation's political and cultural heritage. (List, 1837a, p. 39)

### Liberty - in economics and politics

... Following these examples every responsible government should strive to remove those obstacles that hinder the progress of civilisation and should stimulate the growth of those economic forces that a nation carries in its bosom. (List, 1837a, pp. 42-43)

### Quoting Jean-Baptiste Say, List comments,

"It is only indirectly that political liberty may be more favourable (than a dictatorship) to economic prosperity - or for that matter to the progress of cultural activities". All history refutes this notion. The truth is the very opposite. (List, 1837a, p. 40, fn.1)

### Education, morality, and politics

Educational facilities will be extended and better standards of morality will be established. Political institutions, too, will be improved. In this way a backward nation can develop into a progressive state. (List, 1837a, p. 44)

### List points to the need for regulations,

But politics demands, in the interests of each separate nation, guarantees for its independence and continued existence, special regulations to help its progress in culture, prosperity, and power, to build its society into a perfectly complete and harmoniously developed body politic, self-contained and independent. (List, 1841b, *Introduction*, in Hirst, 1909, p. 291)

### The Nation and the individual

The progress of the individual is dependent on the progress of the whole nation.

From the nation they draw all the benefits of civilisation, enlightenment, progress, and social and political institutions, as well as advances in the arts and sciences. (List, 1837a, p. 30)

We have already observed that the fortunes or misfortunes of individuals are dependent upon the maintenance of the independence and progress of the whole nation. (List, 1837a, p. 33)

### International Politics

Nations should aid each other in the process of progressing. Towards England, List is critical as well as grateful,

It is indeed strange to see at the same time the present Ministry of England ... jealously watch to prevent every progress of other rival nations, particularly of the United States. (List, 1827b, p. 246)

It is no more than fair that England, now that she has attained the culminating point of her industrial growth and progress, should restore again to the nations of Continental Europe a portion of those productive forces which she originally derived from them. (List, 1841a, p. 56)

The world has not been hindered in its progress, but immensely aided in it, by England. (List, 1841a, p. 365)

List warns the USA against diluting the union,<sup>42</sup>

As the Roman military power was weakened by the extension of their territory, so, I fear, the power, the progress of civilization, the national strength of this union would be checked by an additional accession of states. (List, 1827b, p. 200)

## Free trade

List sees a need for poor nation to learn from more developed nations through free trade, and Russia progressed in this way, but Germany has developed to such a degree in commercial policy that she will not be fooled,

The economic betterment of a nation which is at a low level of intelligence and culture, or in which the population is small in relation to the extent and productivity of its territory, is best accomplished through free trade with highly cultivated, rich, and industrious nations. In the case of such a country every restriction of trade, intended to plant manufacturing industry within its borders, is premature and injurious, not only to the welfare of mankind in general, but to the progress of the nation itself. Only when the intellectual, political, and economic education of the nation has so far advanced as a result of free trade that its further progress would be checked and hindered by the import of foreign manufactures and the lack of a sufficient market for its own goods, can protective measures be justified. . (List, 1841b, *Introduction*, in Hirst, 1909, p. 312)

Russia owes her first progress in civilisation and industry to her intercourse with Greece, to the trade of the Hanseatic Towns with Novgorod and (after the destruction of that town by Ivan Wassiljewitsch) to the trade which arose with the English and Dutch, in consequence of the discovery of the water communication with the coasts of the White Sea. (List, 1841a, p. 68)

---

<sup>42</sup> This warning is as timely for the EU 150 years thereafter.

For even now we Germans have made sufficient progress in commercial politics to make the idea that we can be paid in moonshine and empty promises seem absurd and insulting. (List, 1841b, *Introduction*, in Hirst, 1909, p. 297)

### Falling behind

List underlines the danger of falling behind, the reason being that this would undermine a nation's independence and freedom of action, as well as its future well-being. And the danger is larger the more the rest of the world advances,

For the more rapid the growth of a spirit of industrial invention and improvement, of social and political reform, the wider becomes the gap between stationary and progressive nations, and the more dangerous it is to remain on the further side. (List, 1841b, *Introduction*, in Hirst, 1909, pp. 287-288)

... every nation which makes no forward progress sinks lower and lower, and must ultimately fall (List, 1841a, p. 8)

## **2.09 List's partial conversion from 'free trade' – according to List**

Studying the development of List's ideas is an interesting illustration of what it often takes to change a person's mind. At first List was a free trader; Trade without internal restrictions within the divided Germany was the road to national prosperity and progress. Most people in the German speaking areas had become followers of Adam Smith, under influence of the dominating Cosmopolitan and universally oriented philosophy of the late 18<sup>th</sup> Century's Enlightenment. Furthermore, Napoleon's imposed protectionist "Continental System" had been a disappointment to many non-French. The general mood therefore was for liberalism, freedom, and national emancipation.

List says in 1841, that when he started to doubt the free trade dogma, it was the state of Germany that triggered him to change his views and continued to do so,

It was the state of his own country which more than twenty years ago roused in him the first doubts in its infallibility. It has been the state of his own country which has induced him since then, in many unsigned articles, and, finally, in longer essays under his own name, to develop views opposed to the prevailing theory. And to-day it is still mainly the interests of Germany which have emboldened him to come forward with this book, although he cannot deny that a personal consideration has also influenced him. This is, the obligation he feels to make clear through a work of some length that he is not entirely unqualified to speak a word on questions of political economy. (List, 1841b, *Introduction*, in Hirst, 1909, p. 300)

List starts his third letter in 1827 by describing the impolite manners of his opponents such,

The system of Adam Smith has assumed so great an authority that those who venture to oppose it, or even to question its infallibility, expose themselves to be called idiots. Mr. Say, throughout his whole work, is in the habit of calling all objections to his sublime theory the opinion of the rabble, vulgar views, etc., etc. Mr. Cooper on his part, probably finding it not quite proper to speak in this country as much as the Parisian about rabble population, etc., uses the term "ignorance." He regrets very much that both the Pitts, as well as Mr. Fox, were such blockheads as not to conceive even the fundamental principle of the sublime theory. These infallible theorists assure us, as gravely as modestly, that minds like those of Edward III., Elizabeth, Colbert, Turgot, Frederick II., Joseph II., Pitt, (i) Fox, Napoleon Bonaparte, Washington, Jefferson, Hamilton, a chart of the minds of the most enlightened men of all ages, were not enlightened enough to comprehend the true principles of political economy. (List, 1827b, Letter 3, p. 41)

List then describes his gradual conversion from a free trader to what I prefer to call a pragmatist, and I find his personal description of the background for his conversion to be of great importance,

Though, therefore, an opponent of Mr. Say finds himself in tolerable good company amongst the ignorant, yet I consider it necessary to state that, during many years I was not only a very faithful disciple of Smith and Say, but a very zealous teacher of the infallible doctrine; that I not only studied the works of the masters, but also those of their ablest disciples in England, Germany, and France, with some assiduity and perseverance, and that I did not become a convert till arrived at the age of maturity. I saw then in my native country the admirable effects of what is called the continental system and the destroying effects of the return of what they call trade after the downfall of Napoleon. (List, 1827b, Letter 3, p. 41)

List then describes in some detail the development of the German economy, as the reason for his conversion,

German industry, though fostered but partially by the continental system, because enjoying protection only against English competition and remaining exposed to French competition, whilst the borders of France were closed to it, made admirable progress during that time, not only in the different branches of manufactured industry, but in all branches of agriculture, which, though labouring under all the disadvantages of the wars and of French despotic measures, were flourishing. All kinds of produce were in demand and bore high prices, and wages, rents, interest of capital, prices of land, and of every description of property were consequently enhanced. But after the downfall of the continental system, after having acquired the enjoyment of English goods a great deal cheaper than the nation could manufacture them, the manufactures languished. The agriculturists and noble land proprietors were at first much pleased to purchase at so low a price, particularly the wool growers who sold their wool to England at very high prices. The principles of Smith and Say were highly talked of. But the Eng-



lish, after having acquired the German market for their manufactures, did not hesitate to foster their landed interests too by corn and woollen bills; the price of wool and grain, and in consequence rents, wages, and property in Germany sunk more and more, and the most ruinous effects followed. (List, 1827b, Letter 3, pp. 41-42)

List admits his failure to understand and from this concluded to convert from being a free trader, not from pure theoretical analysis but rather since "I judged the tree by its fruit",

The contemplation of these effects induced me first to doubt of the infallibility of the old theory. My eyes being not sharp enough to discover at a glance the errors of a system so ingeniously built up and supported by so many valuable truths, I judged the tree by its fruit. I conceived that, as a theory in medicine, however ingeniously invented, and however supported by brilliant truths, must be fundamentally erroneous if it destroys the life of its followers, so a system of political economy must be wrong if it effects just the contrary of that which every man of common sense must be supposed to expect from it. (List, 1827b, Letter 3, p. 43)

List then describes the start of the national movement for a new economic policy, in which he took a central part,

In consequence of this conviction I came out openly against the followers of this theory, and so popular was this opposition that in a few weeks a society of many thousands of first-rate manufacturers, merchants, etc., dispersed throughout the whole ancient German Empire, was founded, for the purpose of establishing a system of German national economy. Elected their counsellor I visited, accompanied by deputies of the society, the different courts of Germany (and the Congress of German Ministers held at Vienna in 1820) in order to induce the several Governments of the necessity of such a system. All people, in the interior, were convinced at last of this necessity, agriculturists, wool growers, proprietors of estates, as well as manufacturers.

No opposition was heard anywhere, except in the Hanse towns and in the city of Leipzig, and even there none but the agents of English firms and the bankers, whose momentary interests were at stake, took part in this opposition. These adversaries of the common welfare were headed and supported by a few learned disciples of Smith and Say, who, either offended in their literary pride by the opposition against a theory, the development and illustration of which formed their literary renown, or bound by personal interests and by their situation, still rode on the old hobby-horse of free trade, and harped upon its beneficial effects, whilst free intercourse was checked in every possible way by foreign restrictions.

The most enlightened theorists of the interior, on the contrary, gave way to the principles of the society, .... (List, 1827b, Letter 3, pp. 43-45)

It is therefore evident that List changed his mind while living in Germany, and based on German experience. We may therefore not say, as some do, that List had changed his mind *after* his contact with the American economists and -experience, and thereafter argues for protec-

tion, as in his *Outlines* (Cf. List, 1827b). Nevertheless, he may be said to have sharpened and broadened his argument with time. One instance of the influence of this experience (as well as his visit in London in 1824), and according to his own words, it was in the USA that his eyes were opened to the importance of internal communication, concerning the matter of promoting a national (home) market and transport being a productive force in its own.

Quite consistent with the views of Adam Smith (Smith, 1776, book IV, ch. II, p. 39, p. 468 in the Liberty edition), List suggested, in his petition to the German Federal Assembly in Frankfurt a. M. (Cf. List, 1819), that Germany should establish a national customs union and abolish the 38 customs borders in order to establish an efficient internal free trade.

Furthermore, he suggested that it adopt an external policy of retaliatory duties, as this would be a good policy in order to force other trading nations to comply with free trade. Whereas Smith argues for retaliation as a temporary measure, List argues for retaliation as a permanent measure. In practice, however, the difference might be negligible. Later, however, List argues strongly against such retaliatory practices (Cf. List, 1841a, ch. 18, pp. 318-319) and claimed that any arrangement of duties, customs should serve the long-term needs of the productive powers. It is clear that already in his early period, the ultimate goal of this policy was an elevated civilisation through the instrument of free trade. We can also notice the early ideas on a stage theory, when he argues for

... the cause of general free trade, by which Europe alone can reach the highest stage of civilisation. (List, 1819, p. 492)

In the so-called *Vienna Memorandum* and letters to Count Metternich (Cf. List, 1820), List argues likewise,

... and alone in this way can we achieve world free trade which uniquely seems to represent means through which we may reach the highest stage of human welfare. (List, 1820, p. 539)

His writings referred to above point out the injustice that whereas externally produced British goods were imported more or less freely to the German states, “internally” produced German products were faced with considerably higher duties. He also argues for imposition of a general externally oriented duty.

## **2.10 The Mercantile- and the Manufacturing System**

List writes in the preface to *The National System* that although he was no Mercantilist, he still acknowledged some valuable parts of this tradition,

I have been accused by the popular school, of merely seeking to revive the (so-called) 'mercantile' system. But those who read my book will see that I have adopted in my theory merely the valuable parts of that much-decried system, whilst I have rejected what is false in it; ... (List, 1841a, p. xxx)

Of interest to the student of international law concerning international economic co-operation, List argues that a mutually beneficial policy of a harmony of interests had to be regulated on both the national and the international arenas. Following Italian economists, he distinguishes between two types of economic policy historically before Smith; that of the mercantile system and that of the manufacturing system (Cf. List, 1837a, p. 178). He favours the latter. I might prefer to call the two systems variations within the mercantile system as this would be more consistent with historical practice. I would prefer to call these two variants *Prosper Thy Neighbour Policy* and *Beggar Thy Neighbour Policy* while admitting that there is no exact delineation between these.<sup>43</sup> List may have a heuristic point, though, when singling out one "moral" and one "immoral" system, in naming these with entirely different names. List writes,

THE TWO FUNDAMENTAL principles of the mercantile system were that a country can prosper only at the expense of another country and that national wealth consists purely of precious metals. ... This policy is derived from the myopic view of merchants ...

It would be a mistake to confuse the "mercantile system" with the "manufacturing system" with the "manufacturing system" and to condemn them both in the same breath. The manufacturing system was described by certain writers before Colbert's day. It was first practised by the English government and was later copied by Colbert. The Italians called this system "Colbertism" and they differentiated between the "mercantile system" and the "manufacturing system". Supporters of the "manufacturing system" do not suggest that a country can prosper only at the expense of another country. Their object is to enrich all the citizens in a country ... (List, 1837a, p. 178)

## 2.11 Colbert's legacy

The French Minister of Finance under Louis XIV is often put forward as the archetype of protectionism against which Smith rebelled. It ought to be remembered that there were geopolitical aspects embedded in this economic strife and –debate. There was accordingly every reason for the British to ridicule a man who managed to strengthen Britain's arch-enemy.

---

<sup>43</sup> This would be in line with the names chosen by Prime Minister Mahathir in his address at the annual conference of the IMF and IBRD (World Bank) in Hong Kong 1997.

List claims that Colbert's project was adopted from British practice but doomed on French soil because of the lack of political freedom,

Colbert appears to us not to have been the inventor of that system which the Italians have named after him; for, as we have seen, it was fully elaborated by the English long before his time. Colbert only put in practice what France, if she wished to fulfil her destinies, was bound to carry out sooner or later. If Colbert is to be blamed at all, it can only be charged against him that he attempted to put into force under a despotic government a system which could subsist only after a fundamental reform of the political conditions. (List, 1841a, p. 114)

And, continues List, had Colbert's system been allowed to continue, France might not have had a revolution and established herself as an efficient competitor to the dominance of England,

But against this reproach to Colbert's memory it may very well be argued that, had his system been continued by wise princes and sagacious ministers, it would in all probability have removed by means of reforms all those hindrances which stood in the way of progress in manufactures, agriculture, and trade, as well as of national freedom; and France would then have undergone no revolution, but rather, impelled along the path of development by the reciprocating influences of industry and freedom, she might for the last century and a half have been successfully competing with England... (List, 1841a, p. 114)

List defends Colbert against Adam Smith's accusations, and against later censorship of Colbert, in the following way,

When this great statesman took office the French fleet had been ruined. The state no longer protected industry. There was a depression in agriculture. Commerce was restricted by provincial customs duties. The public finances were in a state of disorder. (List, 1837a, p. 141)

Colbert had the courage to grapple single-handed with an undertaking which England could only bring to a successful issue by the persevering efforts of three centuries, and at the cost of two revolutions.

A century later, the economists have sharply censured Colbert, and maintained that this statesman had been anxious to promote the interests of manufactures at the expense of agriculture: a reproach which proves nothing more than that these authorities were themselves incapable of appreciating the nature of manufacturing industry.(2\*) (List, 1841a, p. 69)

List then describes how French statesmen fooled themselves into adopting free trade, "in opposition to Colbert's policy",

The melancholy condition to which the industry and the finances of France had been reduced by a long course of misgovernment, and the spectacle of the great prosperity of England, aroused the emulation of French statesmen shortly before the French Revolution. Infatuated with the hollow

theory of the economists, they looked for a remedy, in opposition to Colbert's policy, in the establishment of free trade. (List, 1841a, p. 71)

In *The Natural System of Political Economy*, List also defends Colbert,

If ever a man has been accused of crime when, in fact, he showed the qualities of the highest statesmanship, that man was Colbert. But the arguments of his critics are either senseless or are founded upon erroneous premises.<sup>44</sup> To do full justice to Colbert it should be remembered that agriculture in France was hampered by a thousand restrictions during the period of his great reforms. ... (List, 1837a, pp. 142-143)

After Colbert's death all the capacities of the country were monopolized by the royal court. ...The fanaticism and extravagance of Louis XIV were enough to destroy the work of ten Colberts. ... Colbert died in 1683 and two years later Louis XIV revoked the edict of Nantes. (List, 1837a, p. 144)

It is most unfair to Colbert to blame him for the faults of the French constitution, the stupidity of the government, the lack of patriotism of the aristocrats, and the fury of the religious fanatics. (List, 1837a, p. 145)

List also defends Colbert's forerunners, Cardinal Mazarin (1602 – 1661 and his mentor Cardinal Richelieu (1585-1642). Richelieu has often been ridiculed as an evil man in novels like Alexandre Dumas' *The Three Musketeers* and *The Black Tulip* (Dumas, 1850). List writes,

---

<sup>44</sup> 2: We cite here Adam Smith's judgement of Colbert. In view of what we have said above we do not consider that we need to comment upon Adam Smith's criticism. Adam Smith wrote in *The Nature and Causes of the Wealth of Nations*: "Mr Colbert, the famous minister of Louis XIV, was a man of probity, of great industry, and knowledge of detail; of great experience and acuteness in the examination of public accounts, and of abilities in short, every way fitted for introducing method and good order into the collection and expenditure of the public revenue. That minister had unfortunately embraced all the prejudices of the mercantile system, in its nature and essence a system of restraint and regulation, and such as could scarce fail to be agreeable to a laborious and plodding man of business, who had been accustomed to regulate the different departments of public offices, and to establish the necessary checks and controls for confining each to its proper sphere. The industry and commerce of a great country he endeavoured to regulate upon the same model as the departments of a public office; and instead of allowing every man to pursue his own interest in his own way, upon the liberal plan of equality, liberty, and justice, he bestowed upon certain branches of industry extraordinary privileges, while he laid others under as extraordinary restraints. He was not only disposed, like other European ministers, to encourage more the industry of the towns than that of the country; but, in order to support the industry of the towns, he was willing even to depress and keep down that of the country". (Everyman Edition, Vol. II, p. 157) [List's note]

After he had suppressed the nobles Cardinal Richelieu turned his attention to the economy and he tried to expand the expansion of trade and industry. ... Cardinal Mazarin promoted the establishment of cloth workshops .... But all Mazarin's efforts had insignificant results compared with the achievements of Colbert in Louis XIV's reign. (List, 1837a, p. 141)

List claims that if Colbert been allowed to proceed, the Physiocratic system would never have come to light, since it applied only to temporary circumstances in France,

Had the great enterprise of Colbert been permitted to succeed -- had not the Revocation of the Edict of Nantes, the love of splendour and false ambition of Louis XIV, and the debauchery and extravagance of his successors, nipped in the bud the seeds which Colbert had sown -- if consequently a wealthy manufacturing and commercial interest had arisen in France, if by good fortune the enormous properties of the French clergy had been given over to the public, if these events had resulted in the formation of a powerful lower house of Parliament, by whose influence the feudal aristocracy had been reformed -- the physiocratic system would hardly have ever come to light. That system was evidently deduced from the then existing circumstances of France, and was only applicable to those circumstances. (List, 1841a, p. 343)

The Physiocrats were the sworn enemies of the State Mercantilist J.B. Colbert, and had reacted against Colbert's encroachment on the liberties and privileges of the French landed interest as well as on the excesses and corruption of the French administrative system, mainly after the time of Colbert. Likewise, A. Smith, the student of Physiocracy, often criticises Colbert for his mercantilist and regulatory-dirigist policies.

But List claims, that while the Physiocrats attacked Colbert's system, in reality they dealt a sound blow at the privileges of the landowners,

The great merit of this system was, that it bore the appearance of an attack made on the policy of Colbert and on the privileges of the manufacturers, for the benefit of the landowners; while in reality its blows told with most effect on the special privileges of the latter. Poor Colbert had to bear all the blame of the sufferings of the French agriculturists, while nevertheless everyone knew that France possessed a great industry for the first time since Colbert's administration; and that even the dullest intellect was aware that manufactures constitute the chief means for promoting agriculture and commerce. The Revocation of the Edict of Nantes -- the wanton wars of Louis XIV -- the profligate expenditure of Louis XV -- were utterly ignored by these philosophers. (List, 1841a, p. 345)

## **2.12 Napoleon's legacy**

List claims that in spite of the wars of the revolutionary period and thereafter, the industry which was protected by Napoleon's continental blockade made considerable progress,

Notwithstanding that the commotions of the Revolution and the incessant wars of Napoleon could not have been favourable to the prosperity of French industry notwithstanding that the French lost during this period most of their maritime trade and all their colonies, yet French manufactories, solely from their exclusive possession of their home markets, and from the abrogation of feudal restrictions, attained during the Empire to a higher degree of prosperity than they had ever enjoyed under the preceding ancien régime. The same effects were noticeable in Germany and in all countries over which the Continental blockade extended. (List, 1841a, p. 72)

List admires Napoleon's insight in economic affairs and his economic policy, which promoted manufacture, credit, inventions and internal communication - and furthermore was critical to the policy of free trade. Therefore, List regrets the unfair judgment this "enlightened" and "great genius" had received,

Napoleon said in his trenchant style, that under the existing circumstances of the world any State which adopted the principle of free trade must come to the ground. In these words he uttered more political wisdom in reference to the commercial policy of France than all contemporary political economists in all their writings. We cannot but wonder at the sagacity with which this great genius, without any previous study of the systems of political economy, comprehended the nature and importance of manufacturing power. Well was it for him and for France that he had not studied these systems. 'Formerly,' said Napoleon, 'there was but one description of property, the possession of land; but a new property has now risen up, namely, industry.' Napoleon saw, and in this way clearly enunciated, what contemporary economists did not see, or did not clearly enunciate, namely, that a nation which combines in itself the power of manufactures with that of agriculture is an immeasurably more perfect and more wealthy nation than a purely agricultural one. What Napoleon did to found and promote the industrial education of France, to improve the country's credit, to introduce and set going new inventions and improved processes, and to perfect the means of internal communication in France, it is not necessary to dwell upon in detail, for these things are still too well remembered. But what, perhaps, does call for special notice in this connection, is the biased and unfair judgment passed upon this enlightened and powerful ruler by contemporary theorists. (List, 1841a, p. 73)

Nevertheless, List was not devoid of criticism towards Napoleon's Continental Alliance, and argues that Napoleon replaced English dominance with French dominance. This provoked the other Continental nations to the degree that he contributed to a long-lasting nationalist renaissance,

... it must not be ignored that Napoleon desired to give effect to this idea (right in itself) in a manner which was contrary to the independence and to the interests of the other Continental powers. The Continental system of Napoleon suffered from three capital defects. In the first place, it sought to

establish, in the place of the English maritime supremacy, a French Continental supremacy; it sought the humiliation, or destruction and dissolution, of other nationalities on the Continent for the benefit of France, instead of basing itself on the elevation and equalisation of the other Continental nations. Furthermore, France followed herself an exclusive commercial policy against the other countries of the Continent, while she claimed for herself free competition in those countries. Finally, the system almost entirely destroyed the trade between the manufacturing countries of the Continent and tropical countries, and found itself compelled to find a remedy for the destruction of this international trade by the use of substituted articles. (List, 1841, pp. 421-422)<sup>45</sup>

### 2.13 The American System

The American System can shortly be described as an economic strategy that uses 1) High tariff walls to protect domestic production; 2) A national bank to secure a stable domestic currency; and both were intended to finance internal improvements like transport and education.

As mentioned in chapter one, List wrote twelve letters to the *National Gazette*, which then were published as *Outlines of American Political Economy* (Cf. List, 1827b), hailed nationally as a textbook of the American System (of Economics), as opposed to the British System (non-regulated free trade). This influenced Congress in passing the "Tariff of Abominations" in 1828, making List partially responsible for the introduction of the protectionist US tariff laws of 1828, which opened the possibility of public nurture of infant industries, and thereby laid the basis for the industrialisation of North America.

List also contributed to US policy on a number of economic issues through his meetings, letters and speeches in the US, such as *Letters to Governor Miles of Virginia* (1828b), *Harrisburg Address* (1828c), *Remarks on Mr. Camreleg's Report on the Tariff* (Cf. List, 1830a), and *On a Commercial Treaty between France and the United States* (Cf. List, 1830b).

List spent the rest of his life furthering the ideas of the American System of Political Economy, and his magnum opus *The National System* (Cf. List, 1841a) as well as the forgotten *The German National-Transport-System* (Cf. List, 1838) were really efforts to transfer the US continental experience onto the European continent.

List started out as a Liberal Nationalist, but in the US he soon became a Liberal Continentalist. In addition to being termed a national strategy, *The American System* was often termed a continental strategy, since many held the opinion that the United States could only survive the political and economic pressure from the British Empire by expanding across the North-American continent, opinions held by e.g. US Pres-

---

<sup>45</sup> For more comments on Napoleon's system, see Ch. 6 in the section, *A European defence union*.



ident John Quincy Adams. Friedrich List later held the similar opinions concerning Europe (Cf. List, 1841a, p. 270)

Therefore List could also be termed a Continentalist, like Alexander Hamilton, John Quincy Adams and later James Knox Polk and Abraham Lincoln.<sup>46</sup>

In his *Outline of an American Political Economy* List forcefully defends the American System, and complains about the arrogance of his opponents who were motivated by private interests,

... I confine my exertions, ... , solely to the refutation of the theory of Adam Smith and Co., the fundamental errors of which have not yet been understood so clearly as they ought to be.

It is this theory, sir, which furnishes to the opponents of the American System the intellectual means of their opposition. It is the combination of the soi-disant theorists with those who believe themselves interested in the soi-disant free commerce, which gives so much seeming strength to the opposite party. Boasting of their imaginary superiority in science and knowledge, these disciples of Smith and Say are treating every defender of common sense like an empiric whose mental power and literary acquirements are not strong enough to conceive the sublime doctrine of their masters.

Unfortunately, the founders of this dangerous doctrine were men of great minds, whose talents enabled them to give their castles in the air the appearance of strong, well-founded buildings. The important truths they brought to light were the unhappy cause which gave to their whole system the credit of a doctrine too elevated to be questioned by future generations. This doctrine, sir, was embraced by the greater part of those who made politics their particular study, and after having admired a doctrine for ten or twenty years, found it difficult to divest themselves of it. It requires a mind of perfect independence to acknowledge that for so long a time we gave full credit to an erroneous system, particularly if that system is advocated by private interests. (List, 1827b, Letter I, pp. 17-19)

List then declares war on behalf of the American System, by calling for theoretical efforts to combat the opponents of the American System, and develop an alternative.<sup>47</sup>

The American System was a strategy that formulated a cluster of strategies for social modernisation in a globalised world, at the time when the world was dominated by the British Empire. It was an anti-imperial strategy for national economic independence, as a prerequisite for political independence and freedom.

---

<sup>46</sup> Hamilton even signed many of his articles in the press with "The Continentalist." Adams openly argued for a unification of the whole North-American Continent and Polk saw to the enlargement of the union by the inclusion of new territories like the states in the north east, Texas and California. Lincoln integrated the continent by keeping the union intact and pressing forward construction of the transcontinental railroads.

<sup>47</sup> Cf. List, 1827b, Letter I, p. 17-19; quoted in Ch. 3, in the section, *Develop theory against Smith*.

“The American System” has been seen as a reaction to “The British System” of Free Trade, and is indeed seen as such by List. This is only correct within a narrow geographical frame and within a narrow time frame, between 1846 and 1873, and perhaps not even then, since on closer examination we see that the American System was moulded on the British System of national (imperial) self-sufficiency,

It should be understood that fundamentally the elaborate system of economic controls that were supposed to bind the British Empire in 1763 was in essence not only a protectionist system but one designed to make the Empire as nearly as possible economically self-contained. (Gipson, 1954, p. 25)

On the background of statistics, in his *The Coming of the Revolution, 1763-1775*, Gipson claims that the American colonies were among the chief economic beneficiaries. Therefore, argues Gipson, the origin of the war of independence must be sought in political reasons,

These trade statistics attest the fact that the British colonials of North America in 1763 were among the most fortunate people in the world and also among the most enterprising. (Gipson, 1954, p. 19)

While it is true that much has been written against the system, it is difficult to visualize one that would under given conditions have been better adapted to serve the ends of preserving and nurturing the colonies embraced within the old British Empire before 1763. That they themselves were among its chief beneficiaries can hardly be questioned in view of the impressive evidence of their unprecedented development in the course of the eighteenth century.

But by 1763 the old British continental colonies were arriving not only at economic maturity, but at political maturity as well. (Gipson, 1954, pp. 26-27)

Without going further into this complex and heated debate, regarding trade policy it will serve our purposes to suggest that The American System was a copy of the British System, with two major differences. First, instead of making Britain the hub of the empire, the colonies themselves were to be the hub of their own system and secondly, the American System would promote universal progress as opposed to the British mercantilist System of “beggar thy neighbour”. But the latter was more a statement of intention than an engraved part of the system, and with time the international results of US policy were to be ... let us say, debatable.

We should nevertheless note that there is more to the American System than trade policy. List sees the English policy as imperial and dependence-creating, whereas the American policy is seen as anti-imperial and independence-creating,

American national economy, according to the different conditions of the nations, is quite different from English national economy. English national

economy has for its object to manufacture for the whole world, to monopolize all manufacturing power, even at the expense of the lives of the citizens, to keep the world and especially her colonies in a state of infancy and vassalage by political management as well as by the superiority of her capital, her skill and her navy. American economy has for its object to bring into harmony the three branches of industry, without which no national industry can attain perfection. It has for its object to supply its own wants, by its own materials and its own industry — to people an unsettled country — to attract foreign population, foreign capital and skill — to increase its power and its means of defence, in order to secure the independence and the future growth of the nation. It has for its object lastly to be free and independent and powerful, and to let everyone else enjoy freedom, power and wealth as he pleases.

English national economy is predominant; American national economy aspires only to become independent. (List, 1827b, Letter 2, p. 37)

Furthermore, List argues that the American System also encourages the Christian idea of co-operation and harmony between capital and labour within the nation, serving to create a decent standard of living for the common workingman,

As there is no similarity in the two systems, there is no similarity in the consequences of it. The country will not be overstocked with woollen goods any more than it is now overstocked with cabinet ware; the manufactories will not produce vice, because every labourer can earn enough to support his family honestly; nobody will suffer or starve from want of labour, because if the labourer cannot earn enough to support his family, otherwise he can cultivate the earth — there is yet room enough for hundreds of millions to become independent farmers. (List, 1827b, Letter 2, pp. 37-39)

By providing labour with ample bargaining power and thus buying power, the American System contributes to avoid the ever returning problem of capitalism, namely underconsumption crises – or ‘overproduction’ as it is normally termed by Marxists. Therefore it also tends to reduce the drive for empire, intended to provide markets for the superfluous products. In other words, a balanced market and harmony at home leads to harmony abroad.

The hub of this system and the intended effect would therefore be how to do exactly that; provide labour with ample buying power. And the solution was protection; protection against cheap labour – to improve the position of national Labour, both regarding her skills and her bargaining power. These matters are tightly related: List emphasises that the workman is more efficient in manufacturing states, his time is therefore higher valued with higher wages. Higher wages makes it possible to entertain a better living standard and produce higher quality goods.<sup>48</sup>

---

<sup>48</sup> This matter is also discussed in Chapter 4; in the section *Social well-being improves economic efficiency*.

As List pointed out (List, 1841a, p. 307), protection makes it more lucrative to establish oneself inside the tariff barriers - like e.g. the Japanese did in the EU in the 1980s; and the industrial world's manufacturers thereafter did in China. Protection thus reverses the stream of Capital flight under free trade, to e.g. low wage countries, and partly makes it unnecessary to install Capital controls. This potentially gives increased investment; another boost to the demand for Labour; and increases her bargaining power, which spills back into increased demand for consumer products and potential profit for the investor.

The prime reason for protection and the American System was precisely to secure labour and the established skills, and more so even elevate them. The title of one of Horace Greeley's<sup>49</sup> books is telling: *Essays .... Serving To Explain and Defend The Policy of Protection to Home Industry, As a System of National Cooperation For True Elevation of Labor* (Greeley, 1875). By using the phrase 'elevation', Greeley gives away the deeper intentions of the system: The task was to protect and improve mental capital.

List developed much of his theory before he went to the USA. But he was severely influenced by his stay in the US, and gathered tools with which to strengthen his arguments. His later system can therefore only to some degree be seen as an adaption of the American modernisation strategy to Germany and other circumstances,

List was a citizen of two worlds, the old and the new. He was not only the first German to have explored the economy of the United States scientifically, but, as an educator, he also made his own impression upon the cultural type in America then in the process of generation. And in the workshop of the new world, where he was welcomed to collaborate without prejudice, he wrought the armaments which enabled him to intervene in the cultural work of the old world with rekindled power. Thus, List is a mediator between Germany and the United States: both have a right to claim him, and both can be proud of him, but both also owe him the greatest gratitude. (Introduction, List, 1929-36, *Werke*, Vol. 2, p. 61)

Alexander Hamilton is often regarded as a forerunner of F. List. Herbert Schneider writes of A. Hamilton,

He called himself a "continentalist" and, ... Hamilton's economic nationalism ... certainly established American capitalism. ... Hamilton was exceptional in his time not only in being an ardent nationalist but also in basing his theory on political economy rather than on "the science of government." ... He had studied the classics, ... but his ideas were for the most part hammered out of military experience. ... More significant than Hamilton's view of federalism was his analysis of politics in terms of power and of power in terms of money. During the dark days of the war, when he shared Washington's concern for the demoralized remnants of the army, he

---

<sup>49</sup> Another man was later named after Horace Greeley; Hjalmar Horace Greeley Schacht, Adolf Hitler's financial magician, and president of Germany's national bank.

became convinced that military power could only be revived on the basis of financial power. ... Political power is ultimately, according to Hamilton, based on credit. It was no jest when he insisted that a public debt is a public asset or when he defended an expensive government on the ground that since it needed more taxes it would get more power. He thought of government less in terms of legislation than of taxation. Maddison complained that Hamilton had no objection to using the "general welfare" clause of the Constitution for whatever concerns the "general interests of learning, of agriculture, of manufactures, and of commerce, ... as far as regards an application of money." Thus, to conceive of government as the active promotion of "general interests," instead of limiting it to "justice and equality," was indeed revolutionary in American Political theory. But it was the very essence of Hamilton's program, and he at once gave "to that government a tone and energy far beyond what was intended by the founders."

From the point of view of money power Hamilton envisaged the nation, bound in "strict and indissoluble Union," as primarily a union of credit and of commerce. To fund the public debt, "consolidate" and expand credit in the hands of the Federal Government, seemed to him an elementary business necessity, and the objection that this would enrich speculators was no real objection to his mind. Fluid capital for industrial expansion was his prime concern, and if this power were concentrated in the hands of bankers and other investors, so much the better. Not the distribution of wealth, but the direction of wealth was what mattered in the end. Hamilton's great idea was to encourage manufacturing. ... The benefits of manufacturing, he argued, would be nationwide. In his famous *Report on Manufactures* (1791) he conspicuously applied Adam Smith's arguments for the diversion of labor on a national scale. Let the labor of America be diversified, let the government give encouragement to those forms of labor that most need it, let there be free trade within the Union, and let America thus become an independent world power. (Schneider, 1946, pp.90-93)

As is natural with List's far more extensive works, he discussed a broader range of issues than Hamilton, and had a more developed economic sociology than Hamilton's simple and mechanical perception of the productive powers, especially the innovative and co-operative aspects of economics, a matter which lies at the heart of understanding economic development.<sup>50</sup>

The similarities between Hamilton and List are nevertheless many. Like Hamilton, List was occupied with the power- and military aspect of economics, and List also regarded the direction of wealth; into manufacturing, as of primordial importance. Hamilton's focus on the financial side of power corresponds to that of List, as evident especially in List's *National System* ..., Chapter 23: *The Manufacturing Power and the Instrument of Circulation*. (Cf. List, 1841a) and List also sees the remarkable potential in public credit.<sup>51</sup>

---

<sup>50</sup> These matters regarding the productive forces and Hamilton are discussed further in Chapter 4, in the sections *Comments on List's approach to Capital of Mind* and *Confederation of Labour* (Cf. List, 1841a).

<sup>51</sup> Discussed in the section *Productive public credit in a sound credit system* in

## 2.14 The Industrial System - and national unity

After returning to Europe, List preferred to term his preferred economic policy not 'the American System', but rather 'the industrial system', and he differentiates it from Mercantilism.<sup>52</sup> In his chapter on the industrial system (in *National System*), he writes of its three major benefits: These are an emphasis on manufacture, the means to attain manufacture, and both based on the idea of 'the nation' and its changing conditions,

The merits of the Industrial System as compared with later ones, are:

1. That it clearly recognises the value of native manufactures and their influence on native agriculture, commerce, and navigation, and on the civilisation and power of the nation; and expresses itself unreservedly to that effect.
2. That it indicates what is in general the right means whereby a nation which is qualified for establishing a manufacturing power, may attain a national industry.(1\*)
3. That it is based on the idea of 'the nation,' and regarding the nations as individual entities, everywhere takes into account the national interests and national conditions. (List, 1841a, p. 339)

List praises the national unity that the rise of monarchy led to, as opposed to the disunity under feudalism and aristocracy, leading to much greater efficiency,

... This was an immeasurably more perfect commonwealth than the previously existing one, because the manufacturing power, which in the municipal republic had been confined to a narrow range, now could extend itself over a wider sphere; because now all existing resources were placed at its disposition; because the division of labour and the confederation of the productive powers in the different branches of manufactures, as well as in agriculture, were made effectual in an infinitely greater degree; because the numerous classes of agriculturists became politically and commercially united with the manufacturers and merchants, and hence perpetual concord was maintained between them; the reciprocal action between manufacturing and commercial power was perpetuated and secured for ever; and finally, the agriculturists were made partakers of all the advantages of civilisation arising from manufactures and commerce. (List, 1841a, p. 339)

List explains that the nation state is like an extended city, whose foundation lies in the mental powers, and as an effect in the political institutions etc.,

---

chapter 4 (Cf. also List, 1841a).

<sup>52</sup> In his *National System*, the title of Chapter 29 is *The Industrial System (Falsely Termed by the School 'The Mercantile System')* (List, 1841a, p.337).

The agricultural-manufacturing-commercial State is like a city which spreads over a whole kingdom, or a country district raised up to be a city. In the same proportion in which material production was promoted by this union, the mental powers must necessarily have been developed, the political institutions perfected, the State revenues, the national military power, and the population, increased. Hence we see at this day, that nation which first of all perfectly developed the agricultural, manufacturing, and commercial State, standing in these respects at the head of all other nations. (List, 1841a, p. 339)

List's agricultural-manufacturing-commercial State is related to the Mercantilist nation state, as Arno Mong Daastøl writes,

These city-states mostly functioned as enclave economies, which functioned relatively, isolated from the hinterland. The first volume of Heckscher's (Heckscher, 1931) *Mercantilism* is appropriately entitled 'Mercantilism as a Unifying System' following Gustav Schmoller's first focus on this side to mercantilism (Schmoller, 1884). In its pursuit of power and wealth, state mercantilism fused the monarchic and municipal mercantilist traditions. This alliance between the King and the middle class - opposed to the feudal aristocracy - created a powerful instrument: The Nation-State.

At the same time the expansion of markets through improved communication allowed for greater possibility of economies of scale, higher diversification and production for niche markets and higher production for a monetary market - as opposed to the barter market. The economies of scale allowed for improved technology and made it possible for a higher percentage of the population to engage in new activities, again contributing to diversity, division of labour and economies of scale in a positive feed-back circle. The mercantilists' promotion of manufacturing also intended to emulate these positive effects of the city modelled as a huge productive machinery: the factory. (Daastøl, 2000)

Gustav von Schmoller in 1884 describes how Mercantilism was an absolutist state policy of unification and essentially; state making,

Only he who thus conceives of mercantilism will understand it; in its innermost kernel it is nothing but state making - ... (Schmoller, 1884, p. 50)

What, to each in its time, gave riches and superiority first to Milan, Venice, Florence, and Genoa; then, later, to Spain and Portugal; and now to Holland, France, and England, and, to some extent, to Denmark and Sweden, was a *state* policy in economic matters, as superior to the territorial as that had been to the municipal. ... (Schmoller, 1884, p. 48)

.... It is now to be noticed that it was the "enlightened," more or less despotic, monarchy of the seventeenth and eighteenth centuries by which this movement was initiated and pushed forward. (Schmoller, 1884, p. 52)

Schmoller furthermore describes how this unifying Mercantilism resulted in "the total transformation of society" and "liberated a thousand forces towards progress",

The essence of the system lies not in some doctrine of money, or of the balance of trade; not in tariff barriers, protective duties, or navigation laws; but in something far greater: — namely, in the total transformation of society and its organisation, as well as of the state and its institutions, in the replacing of a local and territorial economic policy by that of the national state. With this accords the fact, recently pointed out with regard to the literary history of the movement, that what is peculiar to all the mercantilist writers is not so much the regulations of trade which they propose for the increase of the precious metals as the stress they lay on the active circulation of money, especially within the state itself.<sup>153</sup>

The struggle against the great nobility, the towns, the corporations, and provinces, the economic as well as political blending of these isolated groups into a larger whole, the struggle for uniform measures and coinage, for a well-ordered system of currency and credit, for uniform laws and uniform administration, for freer and more active traffic within the land, - this it was which created a new division of labour, a new prosperity, and which liberated a thousand forces towards progress. (Schmoller, 1884, p. 51)

## 2.15 Economic Nationalism

- as a logical and practical response to economic pressure from abroad

List claimed that 'the Industrial System' (or 'economic nationalism') was a natural and practical response to economic pressure from abroad.

In his path breaking book, *Marxism, China, & development: reflections on theory and reality*, James A. Gregor (Gregor, 2000), points out the legacy of Mary Matossian's article *Ideologies of Delayed Industrialization: Some tensions and Ambiguities* (Matossian, 1966).

Like List suggests concerning the Industrial System, Matossian claims that certain economic strategies must be understood as a logical response to certain pressures. Gregor explains,

... In the 1960s, Mary Matossian argued that some of the most significant revolutionary ideologies of the twentieth century might best be understood as common functional responses to determinate historic, social, and economic challenges. Some of the most important of those challenges arise when an industrially backward nation finds itself in sustained contact with those industrially advanced. The cultural, political, economic, and strategic disabilities associated with such contact produces a native intelligentsia increasingly sensitive to their nation's vulnerabilities. Afflicted with a painful sense of inadequacy, they become increasingly receptive to the conviction that their community requires large-scale industrialization and modernization if it is to regain control of its destiny.<sup>8</sup>

Matossian argued that the ideologies emerging out of such circumstances display certain similarities. Among those ideologies sharing a family

---

<sup>53</sup> 1) This is the main point in Bidermann's instructive lecture Ueber den Merkantilismus, Innsbruck, 1870. (Schmoller's note)



resemblance, she identified Marxism-Leninism, Italian Fascism, Kemalism, Gandhism, the Indonesian Pantjasila, the Egyptian Philosophy of the Revolution, and Sun Yat-sen's *Saimin zhuyi*. The suggestion was that Sun's ideology might best be understood in broad comparative context, since it shares certain defining properties with a number of other contemporary doctrines. The similarity of ideas that animate such ideologies are conceived more than the consequence of personal contacts and mimetism; they are a function of a common collective psychology born of common problems and shared socioeconomic influences. None of this appears in Marxist theory, neither in the Marxist theory of revolution nor in the standard Marxist interpretation of fascism. (Gregor, 2000, p. 51)

A similar argument has been used to explain Syndicalism (trade union Socialism), that it is a so-to-speak 'organic' response to economic pressures or to be more specific, a practical rank-and-file learning-by-doing strategy. This as opposed to a more theoretical Marxist strategy developed in more or less academic circles.

List describes what he calls Industrial System and claims that it was not described before Steuart. Although List is not explicit about this, it is fairly clear that this is supposed to be the same as the Manufacturing System. List explains that the Industrial System developed not as a theoretical system but as a system of practice, and that even James Stewart did not treat it in a scientific way,

The Industrial System was not defined in writing, nor was it a theory devised by authors, it was simply acted upon in practice, until the time of Stewart, who deduced it for the most part from the actual English practice, just as Antonio Serra deduced his system from a consideration of the circumstances of Venice. Stewart's treatise, however, cannot be considered a scientific work. The greater part of it is devoted to money, banking, the paper circulation -- commercial crises -- the balance of trade, and the doctrine of population: -- discussions from which even in our day much may be learned, but which are carried on in a very illogical and unintelligible way, and in which one and the same idea is ten times repeated. The other branches of political economy are either superficially treated, or passed over altogether. (List, 1841a, p. 339)

List argues that Steuart's analysis ignores most branches, and is limited to English circumstances,

The other branches of political economy are either superficially treated, or passed over altogether. Neither the productive powers, nor the elements of price, are thoroughly discussed. Everywhere the author appears to have in view only the experiences and circumstances of England. In a word, his book possesses all the merits and demerits of the practice of England, and of that of Colbert. (List, 1841a, pp. 339-340)

List in fact criticised even the industrial system for generalising protection and to encourage a prohibiting system of ineffective monopolies. Note in particular point 4, where he says that the system misleads peo-

ple in unflavoured climates to adopt manufactures (Cf. tropical nations like Brazil and Indonesia today). The final point 7 concerns the system refusal to see a necessary future world government and universal free trade. List argues that this system is chargeable with the following chief faults:

1. That it does not generally recognise the fundamental principle of the industrial development of the nation and the conditions under which it can be brought into operation.

2. That it consequently would mislead peoples who live in a climate unsuited for manufacturing, and small and uncivilised states and peoples, into the adoption of the protective system.

3. That it always seeks to apply protection to agriculture, and especially to the production of raw materials -- to the injury of agriculture -- whereas agricultural industry is sufficiently protected against foreign competition by the nature of things.

4. That it seeks to favour manufactures unjustly by imposing restrictions on the export of raw materials, to the detriment of agriculture.

5. That it does not teach the nation which has already attained manufacturing and commercial supremacy to preserve her own manufacturers and merchants from indolence, by permitting free competition in her own markets.

6. That in the exclusive pursuit of the political object, it ignores the cosmopolitical relations of all nations, the objects of the whole human race; and hence would mislead governments into a prohibitory system, where a protective one would amply suffice, or imposing duties which are practically prohibitory, when moderate protective duties would better answer the purpose.

Finally.

7. That chiefly owing to his utterly ignoring the principle of cosmopolitanism, it does not recognise the future union of all nations, the establishment of perpetual peace, and of universal freedom of trade, as the goal towards which all nations have to strive, and more and more to approach. (List, 1841a, pp. 340-341)

List often criticised the (bad sides of the) mercantile system, but he also defended some aspects of it for the sake of historical truth,

The Ministers of George I when they prohibited (in 1721) the importation of the cotton and silk fabrics of India did not assign as a reason for that measure that a nation ought to sell as much as possible to the foreigner, and buy as little as possible from him; that absurd idea was grafted on to the industrial system by a subsequent school; what they asserted was, that it is evident that a nation can only attain to wealth and power by the export of its own manufactured goods, and by the import from abroad of raw materials and the necessities of life. England has followed this maxim of State policy to the present day, and by following it has become rich and mighty; this maxim is the only true one for a nation which has been long civilised, and which has already brought its own agriculture to a high degree of development. (List, 1841a, p. 342)

## 2.16 Theory and practice

Scientific method was close at heart to List, as was economic practice. He starts his 1837 treatise on the *Natural System* by discussing how economic theory has failed to improve economic practice, and gives three reasons why practical people should not listen to theoreticians,

There are three reasons why men in public life, who shoulder great responsibilities, are justified in rejecting the principles laid down by doctrinaire writers which are obviously incompatible with experience in everyday life.

1. A great many economic doctrines have been put forward and the author of the newest theory always denounces the ideas of his predecessors as inadequate and erroneous.
2. Since Colbert's day no one has succeeded in putting a new economic doctrine into practice.
3. Economists never agree among themselves. (List, 1837a, p. 18)

As a constructive alternative, List calls for a symbiosis where economists elaborate useful rules that can aid practical people, and practical people provide economists with facts,

IN THE SCIENCE of economics, theory and practice are virtually divorced from one another - to the detriment of both. Economists condemn practical men as mere followers of routine who fail to appreciate either the truth or the grandeur of the doctrines enunciated by economists. Practical men, on the other hand, regard economists as mere doctrinaires who ignore the facts of life and inhabit a dream world of economic theories that exists only in their imagination.

Consequently the science of economics has failed to achieve its noblest aim which should be to elucidate economic practices and to show how they can be improved. And for their part practical men have not changed since they are as much children of routine today as they always have been in the past.

It is therefore certain that, in a more perfect world, economists would enunciate correct, reasonable and useful rules for practical men to follow, while practical men would provide economists with facts and results which would confirm their theories and enable them to discover new doctrines.

Anyone who is both an economist and a practical man cannot deny that errors have been committed by both parties. ... (List, 1837a, p. 17)

## 2.17 Comparative- and historical method

List's pioneering paper on land reform<sup>54</sup> (Cf. List, 1842) is not only a layout of necessary legal reforms in agriculture. Its method is also interesting, since it was a comparative empirical country study of law, before most accepted forerunners of historical jurisprudence adopted

---

<sup>54</sup> *Die Ackerverfassung, die Zwergwirtschaft und die Auswanderung*. (In English: 'Agricultural Constitution, Small Business and Emigration').

the same method (except Savigny and Eichhorn). List had since long been occupied with this matter, which he had spoken on in details in Philadelphia in 1828 (Cf. List, 1828c).

In his major works, like the *Natural System* (Cf. List, 1837a) and the *National System* (Cf. List, 1841a), List repeatedly compares countries and situations throughout history, and whilst judging and taking due notice of different circumstances and situations, he tries to understand patterns of economic development and formulate tendency “rules”, but never strict “laws”, exemplified with his theory of stages. In other words, he tries to generalise somewhat based on careful empirical observations. In 1841 List explains his method as based on historical studies, in order to extract principles that can be used to analyse present problems,

In direct antagonism to the theory, the author first seeks the lessons of history, deduces from them his fundamental principles, develops them, subjects previous systems to a critical examination, and finally (since his aim throughout is practical) explains the present position of commercial policy. (List, 1841b, *Introduction*, in Hirst, 1909, pp. 300-301)

List claims that his investigations followed an empirical- and realistic method, in the sense that his system is based on historical experience, - and it is not a rationally system based on “a priori” axioms. List writes that he based his system on observations of “actual life” and “the real world”,

When afterwards I visited the United States, I cast all books aside - they would only have tended to mislead me. The best work on political economy which one can read in that modern land is actual life. (List, 1841a, p. xxix)

We have not made any a priori assertions and then attempted to prove them. We have arrived at our conclusions by proving the truth of principles derived from what actually happens in the real world. (List, 1837a, p. 189)

With his historical approach, he continues the evolutionism in the natural sciences of German Idealism, of e.g. Leibniz, Kant, Goethe, Schelling and Oken (Cf. Windelband, 1893, p. 656)<sup>55</sup>, and in particular the evolutionism in the social sciences of Hegel, who became the greatest inspiration for the school in economics that succeeded List in Germany, the Ethical-Historical School.

With his realistic-, historical-, and ethical approach, List laid the foundations of the German Historical School of Economics, also called ‘*ethical-historical*’. These are all terms that later German economists

---

<sup>55</sup> Wilhelm Windelband here points out that the natural science of Galileo and Newton had been mechanically oriented, and that Darwin with his evolutionary approach introduces a dynamic and historical element into the natural sciences.

used to characterise their approach, as pointed out by Wilhelm Roscher,

The prevailing and dominant direction of economics has rightly been called *Realistic*. ...

When this direction possibly is carried through consequently, it must become *historical*. ...

This historical-realistic direction can also be called *ethical*. (Roscher, 1874, pp. 1032-1034, my translation)<sup>56</sup>

## 2.18 Realist and Idealist Methods

To understand the logic of method in science it is helpful to observe the dichotomy, the principles or extremes pitted against each other. Materialism versus idealism; one explains in terms of matter; individual things - and the other explains in terms of ideas; meanings in a structured setting.

Materialism leads to nominalism and to methodological individualism because there is no inherent meaning in matter. A "heap" of matter is thus haphazard and does not have anything but a random structure. For the same reason, materialism also leads to atomism; reductionism and focus on the primary sense data.

One reason for the poor understanding of List and of economics is that unlike e.g. Gustav von Schmoller, Joseph Alois Schumpeter and Ludvig von Mises, few economists today have a good background in the philosophy of science. It is important to set the philosophical platform (read: scientific foundation) right from the beginning. "Main stream" economists have been much wrong in their assessments of the practical world, much because they adhere to a tradition that got this theoretical foundation precisely wrong from the beginning.

### a) Descriptive versus normative - Knowledge versus ethics

---

<sup>56</sup> In his *Geschichte der National-Ökonomik in Deutschland* ('History of Economics in Germany') Roscher writes:

„Die jetzt auf unseren Universitäten vorherrschende Richtung der National-ökonomik ist mit Recht eine *realistische* genannt worden. Es will die Menschen so nehmen, wie dieselben wirklich sind: von sehr verschiedenen, auch nichtwirtschaftlichen Motiven zugleich bewegt, einem ganz bestimmten Volke, Staate, Zeitalter angehörig u. vgl. m. Die Abstraktion von alle dem, welche so manchen, auch großen National-Ökonomen zu schweren Irrtümern verleitet hat, bleibt also nur für des Studium der Vorarbeiten gestattet; aber für die fertige Theorie ebenso wenig, wie für die Praxis.

Wird diese Richtung irgend consequent durchgeführt, so muß sie *historisch* werden. ---

Aber auch *ethisch* kann diese historisch-realistische Richtung heißen.“ (Roscher, 1874, pp. 1032-1034)

List has been called a *Realist*, regarding his "cynical" approach to power in international relations - as opposed to *Idealism* in political science. This means that he recognised that selfishness and brute force historically had been the main driver in international political relations. He is often mentioned along with three other authors in the Realist tradition of political science, standing in a successive line from them, namely Niccolò Machiavelli (Cf. Machiavelli, 1513), Thomas Hobbes (Cf. Hobbes, 1651) and Alexander Hamilton (Cf. Hamilton, 1790).

*Realism* indicates a descriptive and *empirical* approach that focuses on the desire for military and economic power or security, rather than ideals or ethics. *Realism* related to List, thus concerns his descriptive approach regarding international power.

List can also be called an *Idealist* ethically and thus also in political science, since he continuously promoted peace and justice through the rule of law nationally and internationally - as opposed to selfishness and violence.

Regarding ethical goals, he is normatively an *Idealist*. In his descriptive approach to knowledge, his epistemology, he is a *Realist*.

In practice however, he advised a mixed policy; to aim for the philosophical and ethical goals in the long run, but in the short run never to forget the harsh and cynical realities of international power. The alternative to such moderate *Realism* would be self-annihilating.

*Realism* also relates to a core question in the philosophy of science concerning the status of theories. It concerns to List's epistemological search for 'true' or 'real' theories, as opposed to *instrumental* theories ('mere tools') as witnessed in Milton Friedman's approach (Friedman, 1953).<sup>57 58</sup>

---

<sup>57</sup> See also the section below, *English Nominalism versus List's Realism*.

<sup>58</sup> *Realism* therefore also relates indirectly to the parallel philosophical struggle over the status of Universal (general) concepts, where *Realism* ('true references') stood opposed to *Nominalism* ('mere names'). This was a scientific discussion regarding metaphysics that not only took place in late Medieval times but also in Antiquity.

These problems, regarding the status of concepts and of theories, share a similar characteristic; both concepts and theories are heuristic tools that contribute to create order out of individual chaos. They are therefore 'ideal representations' or 'generalisations', and they as such they are 'per definition' doomed to be 'wrong', regarding a realistic description of the factual world's individual nuances - just as any empirically related scientific endeavour is.

This is however, no principal barrier for the *pursuit* of "the truth" by various methods. In other words, denying that any 'truth' has been established at any given time does not preclude continuing a search for it.

These discussions also have close affinities to discussions between the Ancient ontological positions of Idealism and Materialism: What exists 'for real' in the world: General ideas or individual matters? With the destruction of the Galilean-Newtonian world view, starting in earnest perhaps with James Maxwell in 1887, these questions got even more mind boggling. This involved the on-going development of relativity-, quantum-, and string theories - which predict e.g. the interchangeability of matter and energy and the relativity of time.

## b) Empirical Idealism

Although List's system is an empirically based system, it is none-the less a rather logical and coherent system. List can also be called an *Idealist*, where *idealism* not only relates to List's morality and humanitarian goals, but also concerns his method, which is related to – if not totally and consciously based upon – an *Idealistic* philosophical approach to the philosophy of Science, as opposed to a *Materialistic* approach allegedly employed by Marx.

In short, the issue concerns the pre-eminence of spirit over matter as the prime moving force in social and economic development. This issue has a long tradition, dating back to pre-Socratic natural philosophy's debate of 'thought' versus 'world-stuff' (Cf. e.g. Windelband, 1893, p. 31ff). Here the primary moving factor in historical change is the individual - and collective spirit: Morality, insight and will.<sup>59</sup>

Through German Idealism (e.g. Kant, Fichte, Hegel) List had ties to the Hindu-related and Neo-Platonic tradition of the Renaissance (e.g. Cusa, Leibniz, Wolff, Kepler, and Bruno), as opposed to the "materialist / biological" schools (e.g. Hobbes, Locke, Hume, and Newton). As a child of German Idealism List was also a child of the Renaissance.<sup>60</sup>

Therefore, List, a public accountant by profession, may be right in several matters regarding the method of science, but to some degree "unconsciously" so, perhaps mainly due to the circumstances of his time with the dominant tradition in Germany having been Idealistic in character for centuries.<sup>61</sup> One cannot understand the depth of List's method unless one keeps these roots in mind.

During the Renaissance, and due to a Neo-Platonic and therefore (like in Hinduism) a Pantheist understanding of the World and Man as imbued by God, God was sought by studying nature and the historical development of nature, thereby giving birth to empiricism and modern

---

<sup>59</sup> Therefore, the title of this dissertation is *Friedrich List's Heart, Wit and Will*.

<sup>60</sup> Windelband describes German Idealism's roots in the Renaissance such, "This brilliant phenomenon had its general cause in the incomparable vigour and spirit with which the German nation at that time took up again with new strength, and carried to its completion, the movement of civilisation which began in the Renaissance and had been interrupted by external force. Germany attained the summit of its inner development at the same time that its outer history reached its lowest condition, a process that has no equal in history." (Windelband, 1893, pp. 529-530)

<sup>61</sup> Rudolf Steiner may be, however, *consciously* right in many of these matters regarding the ideal basis for economics. Being a philosopher by profession, he staked out the course already in his dissertation (Steiner, 1894) and later applied this angle for his social policy, economics and finance (Steiner, 1922 etc.). Adam Müller is ironically an instance of being called a 'reactionary' economist, who at the same time is considered 'modern' in his monetary analysis, due however to his Idealist point of view, that money in principle is an idea.

science. The Renaissance brought about an empirical approach, whilst retaining the spiritual goals from the Medieval Age, thereby producing an empiricism, which included spiritual phenomena. This is also, what List promotes. A philosophical Idealist, would have to argue that the personal heart, wit and will of individuals is the prime mover in history and therefore also in economics. List's final word in his magnum opus, the *National System* is quite therefore fittingly,

... all that is required of the Governments can be expressed in one word, and that is – ENERGY. (List, 1841a, p. 435)<sup>62</sup>

The historical approach of the empirical school of the German Renaissance, was mainly idealistic-spiritual in orientation, to a large degree focusing on the importance of beliefs and institutions. This may be illustrated e.g. with Friedrich List's emphasis on law and regulation as well as on the "Confederation of Labour"; Gustav Schmoller's strong emphasis on habit and custom (in German: 'Sitten'); Georg Simmel's view of money as institutional symbols; and the emphasis on religion by Max Weber and Werner Sombart.

List's focus is also the individual in the sense that freedom of the individual, in the widest sense including the moral aspect, was the goal of his efforts. Nevertheless, he saw the nation, in the widest sense, as the precondition for the existence of the individual, like Hegel and other Idealists. List therefore spent considerable time sorting out the preconditions for the nation's continued existence and growth. Like Kant and Hegel, List always kept clearly in sight the goal of promoting individual freedom.

A philosophical materialist, on the other hand, would have to argue that the role of a person is negligible, and that neither the duty nor the possibility for an individual to change the world, do exist. Free will, responsibility and morality are accordingly only illusions.

There is therefore, in very general terms, a deep cleavage between the German tradition and the Anglo-French traditions, which we may term 'empirical idealism' versus 'rationalistic materialism', or perhaps more appropriately 'inductive idealism' versus 'logical materialism'.

## **2.19 The rational, materialist, and analytical method**

List was one of the earliest and severest critics of what he labelled Cosmopolitical School of Economics<sup>63</sup>, i.e. the tradition following the Physiocrats and Adam Smith, The Classical School of Economics.

---

<sup>62</sup> This little quote has also been used elsewhere; in the section; *Critic of Malthus' materialism*, in chapter 3; and in the sections *Capital of mind*, and *Immaterial forces as basis for entrepreneurship*, in chapter 4

<sup>63</sup> Depending on the context, List also called it *The Popular School*, *The Exchange Value School* and *The Prevalent School*.



The philosophical background for List's "Idealistically" oriented criticism, is that Nominalism dominated English philosophy, in particular, during the formative years of English Classical Economics. As we shall see below, the epistemological and, as a consequence, the social ideas of Smith and Say were built on ideas from Isaac Newton and the expressed Nominalists Thomas Hobbes and John Locke. This became the basis for the dominating tradition of English Classical and Neo-Classical economics.

As opposed to the evolutionary and historical approach in within the historical school, the a-historical approach of the rationalistic school of the Anglo-British Enlightenment was instead rather materialistic in orientation. ('Empirical' and 'rationalistic', understood here as in their epistemological orientations).

This school followed a rationalist a priori method of axiomatic-deduction, which List also criticised (Cf. List, 1837a, p. 189). Since the 'rationalistic' tradition sought to find (general) economic laws, Karl Knies calls it 'absolutism'.<sup>64</sup>

The analytical and 'rational system' of René Descartes was rational in the sense that one established a few theoretical axioms a priori, based on simple "clear and distinct" facts (Cf. Descartes, 1637, e.g. pp. 65, 163), and therefrom deduced logical conclusions about the real world.<sup>65</sup> Thus, one assumed that a scientific system could be derived from introspection. For much this reason, Smith and even more so his followers have often been charged with starting their investigations, methodologically speaking, in the wrong end (Blaug, 1980, p. 57; and Schumpeter, 1954, p. 538n). Trygve Haavelmo added the same criticism of modern mainstream economics in his Nobel Speech in 1989.<sup>66</sup>

Adam Smith was a child of the rationalist Enlightenment, whereas List was a child of the empirical (German) Renaissance. The materially oriented Enlightenment "de-spiritualised" the empiricism of the Renaissance, by reviving ideas from pre-Socratic natural- and social philosophy: Scepticism, atomism and mechanical materialism.

In his classic *The Metaphysical Foundations of Modern Physical Science*, Edwin Burt, writes that Newton's main source of inspiration was Hobbes who applied the mechanical model of causal explanation. Burt writes that Hobbes demonstrated,

... the first important attempt to apply the new assumptions and method of Galileo universally. This explanation, ... is of profound significance in the early development of the new doctrine of the human mind, and represents

---

<sup>64</sup> Cf. Knies, chapter 8: *Der Absolutismus der Lösungen*, 1853-1883.

<sup>65</sup> The reason for this approach was based on the sceptical pre-Socratic observation that one cannot fully trust one's senses, and that reason only is trustworthy. This insight was re-born during the Enlightenment, in particular with John Locke and with e.g. René Descartes who twisted St. Augustine's religious argument of the soul's self-certainty into the epistemological argument 'cogito sum' (Cf. Windelband, 1893, p. 392).

<sup>66</sup> Cf. Haavelmo, 1989, see quotation in the *Preface*.

Hobbes' chief importance in the current which leads on to the metaphysics of Newton. (Burt, 1924, p. 122)

Thomas Hobbes was a devoted materialist and nominalist who followed Descartes' and Galileo's Euclidean and mechanistic theories in developing theories also of the human mind (Cf. Burt, 1924, pp. 128-129, and 132-133). Burt writes,

Locke, the next great psychologist followed Hobbes still more explicitly and in even greater detail. (Burt, 1924, p. 134)

The analytic model, prescribed by René Descartes, using “clear and distinct” facts as a starting point for axiomatic-deduction. Adam Smith desired to become to economics what Newton was to astronomy, creating a system that revolved around not gravity as with Newton, but rather around self-interest as the principal axiom. Describing Smith's main books (Cf. Smith, 1759; and 1776) Mark Blaug writes that,

Given the pivotal role of sympathy for other human beings in *The Theory of Moral Sentiments* and that of self-interested behavior in *The Wealth of Nations*, both of these books must be regarded as deliberate attempts by Smith to apply this axiomatic method, first to ethics and then to economics (Skinner, 1974, pp. 180-1). ... he stressed the advantage of being able to explain different phenomena by a single familiar principle such as gravity almost as much, if not more, than the capacity to make accurate predictions.” (Blaug, 1980, p. 57)

#### a) Sense data and measurement

Mistaking economics for a natural science, instead of being social science that deals with e.g. institutions, economics has mistakenly focused mainly on material factors. It appears that “mainstream” economists until recently have tended to deal with superficial and formal phenomena that can be measured, rather than the deeper, fundamental, and informal structures of economics.

A related reason for this focus on material factors is that that they have been easier to measure. Therefore, for a long time economists have had trouble in incorporating immaterial production factors into formal models; like trust, morality, social stability, as well as culture, motivation, incentives, know-how and innovation. Such institutional and organisational factors are normally treated as ad hoc to the basic formal economic models, which still by far form the core of student textbooks. These issues are especially important when dealing with economics of development and the economics of “information society”.

During the late Renaissance and the Enlightenment, one assumed that ‘measurement’ of ‘clear and distinct facts’ was a precondition for certainty and scientific quality. Accordingly, there was a discussion over which impressions, or which sense data, that were certain and scien-

tific, and which not. The focus on measurability and formalisation led Enlightenment philosophers, like Galileo, Descartes, Voltaire, Newton, and Locke, to claim the superiority of so-called primary sense data like size, weight, movement, since these were “objective” and “scientific” – since they were measurable.<sup>67</sup> Only the phenomena that were physically measurable were taken into account, in the pursuit of “objectivity” and “scientific” understanding.

However, there were many phenomena such as taste, smell, heat, sounds, and colour, which were not measurable, due to the contemporary primitive status of science and instruments.<sup>68</sup> These were thus regarded as imaginary, subjective, uncertain, and inferior, and accordingly they were classified as unscientific secondary sense data. We may of course today measure many of these, but not during “the dark age of Enlightenment”.

This Enlightenment point of view was opposed by Renaissance-inspired thinkers like G. Berkeley in Ireland, G. Vico in Naples, G. W. Leibniz and J. W. Goethe in Germany, all during the late 17<sup>th</sup> and early 18<sup>th</sup> Century. The Idealists Vico and Berkeley argued that also the measurable (primary) sense data were subjective since human experience in general was subjective. Later, Fichte also drew this conclusion.

#### b) Measurement and egotism<sup>69</sup>

With time, in physics, Descartes’ analytic method based on “clear and distinct” facts, combined with Descartes’ revival of ancient mechanistic materialism based on atoms (from Greek ‘atomos’; uncuttable), while somewhat peculiarly; they were not observable and “clear and distinct” facts.

In economics, the “clear and distinct” facts came to be perceived as hedonistic ‘pain and pleasure’, and accordingly material ‘self-interest’. The materialist faction in the discussion over natural rights thus saw Man as an egotistic and emotional animal.<sup>70</sup> On this basis Descartes developed a mechanical system of emotions (Cf. Windelband, 1893, p. 412), related to Adam Smith’s axiomatic-deductive system of ‘sympa-

---

<sup>67</sup> Cf. Hegge, 1996; Hegge, 1957: *Knowledge and Reality. A Contribution to the Criticism of the Theory of the Subjectivity of Sense Data*; as well as Burt, 1924, p.20; and Ch. 3c: *The Subjectivity of Secondary Qualities*; Ch. 5b: *Treatment of Secondary Qualities and Causality*; and Ch. 6e: *Insistence on Reality of Secondary Qualities - Conception of Man*.

<sup>68</sup> On the other hand, modern science often makes “observations” dependent on complex instruments and theories, and therefore also exposed to uncertainty.

<sup>69</sup> See also the section, *Natural Rights and ‘the selfish system’*, in chapter 5, and the section *Ricardo’s monetary abstraction*, in chapter 3.

<sup>70</sup> The Idealist counter-faction, saw the perfection of reason and morality as their beacon. For a more thorough discussion, see the section, *Natural Rights and ‘the selfish system’*, in chapter 5.

thy', more than one century later (Cf. Smith, 1759). Windelband writes that this selfish system of utilitarian ethics lent itself to quantification,

The thought of Hobbes and Locke, of grounding a knowledge of a strictly demonstrative ethics upon the utilitarian principle, seemed thereby to have found a definite form, welcome to the natural-science mode of thinking. This enticement was pursued by Bentham, ... [who] ... sketches a scheme of a pleasure and pain balance for reckoning the useful and injurious consequences of human activities and institutions. As with Hume ... the reckoning of the ethically valuable falls to the province of the measuring intellect; but the factors with which it operates in this process are solely the feelings of pleasure and pain. (Windelband, 1893, p. 513)

The materialistic and eudemonic approach of the Enlightenment opened the road to formalisation, which became the golden cage of science, and in particular economics. Economics thus was to be trapped in its own toolbox for a long time.

The point of departure for the Cosmopolitical School therefore became the egotistical individual and an analysis of her material values and needs. The image of Man as a biological being became a trademark of the Enlightenment and was perhaps most explicit with J. Bentham, who considered human actions to be governed by pleasure and pain alone, an idea that for a long time has dominated materialist economics. Ethics was to be replaced by calculations, and measurement of the sensations of pleasure and pain.

An ironic twist to this focus on the measurable, was in economics the focus on money, since money – “value in exchange” - was relatively easy to measure. Money, however, is not a material thing. Money is an idea, since like all credit it denotes an institutionalised debt relationship between debtor and creditor, and in this case between the issuing office and the receiving public.

The focus of the German cultural tradition on ideas and symbols had important consequences for the monetary approach of German thought. Money and credit were correctly seen from an immaterial point of view, as symbols of social relations and therefore as community building powers.

List's conception of Man and economics is more realistic but less easy to formalize, since the social world hardly lends itself to simple and discrete numbers, as the mathematician Nicolas Georgescu-Roegen points out,

Arithmomorphic models, to repeat, are indispensable in economics, no less than in other scientific domains. That does not mean they can do all there is to be done in economics. For, as Schrödinger argued in the case of biological life, the difficulty in the subject of economics does not lie in the mathematics it needs, but in the fact that the subject itself is "much too in-

volved to be fully accessible to mathematics". <sup>71</sup> (Georgescu-Roegen, 1971, p. 341)<sup>72</sup>

These strategies of making formal models realistic will, however, tend to become unmanageable, as Wilhelm Roscher wrote as a criticism of David Ricardo). And as Wilhelm Roscher pointed out in his *Principles*; although abstraction is indispensable - real life is too complicated for mathematical models,

... the advantages of the mathematical method of expression diminish as the facts to which it is applied become more complicated. This is true even in the ordinary psychology of the individual. How much more, therefore, in the portraying of national life! ... The abstraction ... must pass as an indispensable stage in the preparatory labors of political economists. ... But it should never be lost sight of, that such a one is only an abstraction after all, for which, not only in the transition to practice, but even in finished theory we must turn to the infinite variety of real life (Roscher, 1877, § 22)

As matters turn out, obviously, economists and accordingly economic theory are products of society in general. In other words, economic insight tends to be bad if society at large suffers from poor 'basic philosophy'; a deprived culture. Therefore, to encourage and produce good economists and theories, society at large must be dominated by generally good and profound understanding and education.

## 2.20 Reductionism

To achieve knowledge with the analytic method, one isolates the important facts and analyses the remaining in order to find recognisable patterns that may aid understanding, prediction, and control - like Adam Smith does regarding 'sympathy' (Cf. Smith, 1759) and 'self-interest' (Cf. Smith, 1776).

Taking individual 'clear and distinct facts' as the point of departure for analysis, is a way to reduce the complexities of life into manageable entities. An analysis is thus carried out by a separation of a given "totality" into individual parts. The process of separation is a convenient tool used to identify individual factors within a causal analysis.

Descartes thus desired to explain (reduce) phenomena on higher levels and complexity by pointing to characteristics at lower levels (Cf. Descartes, 1637, e.g. pp. 65, 163), and he thus provided a frame of ex-

---

<sup>71</sup> E. Schrödinger: What Is Life?, Cambridge 1944. (Georgescu-Roegen's note)

<sup>72</sup> Nevertheless, formally oriented theorist might claim that some driving forces can be dealt with through a formalist approach, as it is possible to bend this approach in many ways, for instance with the use of dummy variables in econometrics. This approach goes even for List's reference to honour and compassion as driving forces, and has for instance been used in econometrics regarding "democracy" and "governance".

planation that was used by mechanistic oriented sciences during the Enlightenment and well into the 19<sup>th</sup> Century, putting its stamp also on economics in her formative years. This mode of explanation potentially ends in materialistic determinism, as has been discussed concerning modern genetics.

When Adam Smith chooses self-interest to be the axiomatic 'clear and distinct fact' of his analysis, he assumes that the characteristics of a simple aggregate will reflect the characteristics of the whole.

It therefore matters is how or what 'reality' is reduced to, and this depends upon the inquirer's 'Image of Man' and views of society and the world; involving both epistemology and ontology. One has to pose the critical question of what to generalise or reduce reality to; Exactly which aspects of reality are central; and more particularly; central for the investigation at hand, and for instance central for whom? This question of the nature of reduction, or 'reductionism', is crucial as this reveals ones interpretation of which aspects of the phenomena are that important in economics. When e.g. a 'non-spiritual' factor like egotism (or later; 'utility maximation') is taken as the axiomatic starting point in the economic science, one ignores important factors that create progress, such as innovation and co-operation. This is hardly a realistic representation of the world.

Furthermore, a problem arises when a few parts mistakenly are seen as representing the whole through generalisation, and where the characteristics of a multifarious whole so to speak is reduced to the characteristics of a few parts only. In the philosophy of science, 'reductionism' was hotly debated after Darwin in the 19<sup>th</sup> Century, and in the 1970s and 1980s. Thus, the "anti-Darwinist" Hjalmar Hegge writes that characteristics on macro- and micro levels are not interchangeable,<sup>73</sup>

... In the contemporary debate in the philosophy of science, this has been named the "problem of reductionism"--the classical philosophical problem as to whether phenomena at a higher level of organization can be "reduced," in some sense of the word, or "related back to," those at a lower level. ...

It is *not meaningful* to "reduce" organic phenomena at the macrolevel (e.g., the forms, colors, behavior of organisms) to microphenomena such as genes or their combinations. The latter do not "explain" the former. A description of the properties of phenomena at the macrolevel and a presentation of their coherence (regularities) are not interchangeable with those that apply to phenomena at the microlevel.

Organic (biological) properties and their coherence that are *specific* to the macrolevel are in no respect of secondary status and are thus *equally real* as those at the microlevel. Thus, of genetic and mutational research in biology we must say, as did the physicist and philosopher Ernst Mach, refer-

---

<sup>73</sup> Referring to classic works by Carl Hempel, Ernst Mach, David Hull, Michael Polanyi and other philosophers of natural science, regarding e.g. physics, biology, and chemistry.

ring to mechanics in his time, that it "apprehends neither the basis for nor a part of reality, but only an aspect of it" (8).<sup>74</sup>

In discussing the problem of reductionism, Hempel (among others) points out that "the logical situation is the same" as, for example, in the kinetic theory of gases in physics, where it is meaningless to speak of observational phenomena at the macrolevel such as pressure, volume, and temperature as having a secondary status in relation to molecular movements in a gas (9).<sup>75</sup> ...

Such reductionism is not even valid between phenomena within the micro-perspective, as, for example, when Hull proves this reductionism inapplicable to the relation between classical Mendelian genetics and molecular genetics (12).<sup>76</sup> Michael Polanyi even shows that neither is there any structural likeness between the so-called chemical genes of molecular genetics and purely chemical processes. .... (13).<sup>77</sup> (Hegge, 1996, in the section *Macrolevel Versus Microlevel Phenomena*)

Adam Smith assumes that circumstances and conclusions on one level of argument (private economy) may automatically be transferred to another level (national economy). Smith writes,

What is prudence in the conduct of every private family can scarce be folly in that of a great kingdom. (Smith, 1776, book IV, ch. II, p. 457)

Adam Smith here makes the classic 'mental jump', known in the literature of philosophy of science as a 'fallacy of the wrong level'; or simply 'level fallacy'; or more specifically as 'Fallacy of Composition' or the 'Reductionist Fallacy'.

In science in general, 'reductionism' means that the study of a 'compound', an 'entity', is based on studies of individual relations between smaller units, whether spatial or organizational. These relations are then somehow "aggregated" in order to explain the compound. Already Plato discussed the issue of part and the whole, in his dialogue *Theaitetos* (Cf. Plato, 360 BC). Aristotle also pointed out that all levels of existence have specific and different characteristics. Aristotle writes,

... the state is by nature clearly prior to the family and to the individual, since the whole is of necessity prior to the part; for example, if the whole body be destroyed, there will be no foot or hand, except in an equivocal

---

<sup>74</sup> 8. Ernst Mach, *Die Mechanik in ihrer Entwicklung* (Leipzig: F. A. Brockhaus, 1908), p. 554 (italics mine). (Hegge's note)

<sup>75</sup> 9. Hempel, p. 104. The point here is that the theoretical combination of the two different levels depends in both cases upon so-called "bridge principles" which say nothing as to whether the observable phenomena at the macrolevel have a secondary or derived status. (Hegge's note)

<sup>76</sup> 12. Hull, pp. 39ff., where it is proven that "the relation between Mendelian and molecular predicate terms express many, many prohibitively complex relations [i.e., it cannot be defined "extensionally"] and that "reduction is [hence] impossible." . (Hegge's note)

<sup>77</sup> 13. Michael Polanyi, "Life transcending Physics and Chemistry," *Chemical and Engineering News*, 45, No. 35 (1967), p. 64. (Hegge's note)

sense, as we might speak of a stone hand; for when destroyed the hand will be no better than that. But things are defined by their working and power; and we ought not to say that they are the same when they no longer have their proper quality, but only that they have the same name. The proof that the state is a creation of nature and prior to the individual is that the individual, when isolated, is not self-sufficing; and therefore he is like a part in relation to the whole. But he who is unable to live in society, or who has no need because he is sufficient for himself, must be either a beast or a god: he is no part of a state.” (Aristotle, 350 BC, Book 1.2).

Dealing generally with teleological causation, the humanistic sciences thus have the advantage of allowing ‘subjective’ ‘interpretation’ of actions considered within a setting that gives meaning. This enables synthesis of parts into a totality - a whole, holism.

We thus have the two positions of ‘reductionism’ - versus ‘holism’. This is an issue that also concerns the different kinds of causation - and not only ‘material causation’ (such as the mechanics of ‘energy’ and ‘movement’) but also ‘teleological causation’ (such as ‘intention’ and ‘self-realisation’).<sup>78</sup> Hegge thus argues that,

We may summarize this in an analogy: the relation between music and the grooves in a record. Any attempt to derive musical tones and their intervals directly from the grooves would be absurd, as would any attempt to derive organic forms at the macrolevel from genes and their combinations. The latter are far from being the "primary" phenomena--quite the contrary. Just as musical tones are what create groove configuration, genetic structures at the microlevel must be regarded as *determined by organic forms at the macrolevel*. "Morphology is the framework," insists Polanyi (14).<sup>79</sup> (Hegge, 1996, in the section *Macrolevel Versus Microlevel Phenomena*)

The nominalist (“individualist” and reductionist) conception of reality has for some time been also challenged even in the world of natural science, as e.g. swarm- and herd behaviour seems to pool individual intelligence into a collective ‘super-brains’, as e.g. with wildebeest, birds, fish, bats, and insects; and especially so with ants.

Neo-Kantian philosophers tended to separate human and natural sciences since they had a non-material view of Man, but followed Newton’s image of Nature. They denied that the humanistic sciences were “secondary” in scientific value to the natural sciences, and claimed a separate and “interpretative” method for the humanistic sciences.<sup>80</sup>

---

<sup>78</sup> Cf. e.g. Windelband, chapter 15; *Mechanism and Teleology*, p. 174.

<sup>79</sup> 14. Polanyi. See note 13. (Hegge’s note)

<sup>80</sup> Reinert and Daastol describe this polarisation in their *Exploring the Genesis of Economic Innovations*; “In the ‘physics envy’ of neo-classical economics, economics and the social sciences are ‘soft’ disciplines, which are in some way inferior to the ‘hard’ natural sciences. The Leibniz-Wolff tradition, continued in the works of philosophers like Wilhelm Dilthey and Hans Georg Gadamer, refuses any such subordination. In Dilthey’s view, the social sciences, concerned with the ends and values instead of laws, should aim to understand (ver-



This separation is slowly about to give way, and open up for a non-material image of both Man and Nature, as illustrated also with Hjalmar Hegge's discussion above.

Summing up; by reducing the *kinds* of causation to one, and furthermore reducing the factors of causation; the reductionism inherent in abstraction always assumes a simplistic model of reality, which may not correspond well to e.g. the realities of human nature. Furthermore, when in a social study the most characteristic 'part' is ignored - the quality of Man, innovation and co-operation - reductionism is likely to make this kind of economics irrelevant. - Or put even simpler; materialist reductionism breeds ignorance of reality.

## 2.21 English Nominalism versus List's Realism

### a) English Nominalism

The foundation for English Classical Economics was Nominalism and Materialism, and the "founding fathers" had less faith in the human rational abilities for inventiveness, and therefore for technological progress, than philosophers and economists who stood in the tradition from the ancient Greek, Heraclitus.<sup>81</sup>

Both the methodology and the "empirical" assumptions<sup>82</sup> of British Classical Economics are contrary to the idea that man is capable of creative, innovative thought and deep altruistic relations. From Hobbes and onwards with John Locke etc., it was basically assumed that man in principle is a shrewd egotistic beast, rather than created in the image of a rational and passionate God, as e.g. Cusa and Leibniz argued.

In Nominalism, relationships between phenomena are seen as based on external properties based on resemblance i.e. more spatial or superficial relations. This paved the ground for the focus on measurability and the mechanistic formalism of the materialist Enlightenment. The focus of measurability and of randomness suggests that a scientific effort in this direction would take the course of pushing to establish tendency "laws" of a stochastic and statistical character -

---

stehen). The natural sciences, on the other hand, aim mainly to describe and conceptualise (begreifen). *Qualitative* relationships are at the core of the *Geisteswissenschaften* - the Humanities, or literally, sciences of the mind. A crucial aspect of these sciences is therefore their *irreducibility to natural science*. ... In the German economic tradition, the inner unity (*Strukturzusammenhang*) of the *Geisteswissenschaften* - its refusal to isolate 'economic man' from the rest of the human being - shines through from Leibniz to Max Weber. (Reinert and Daastol, 1996, pp. 135-136)

<sup>81</sup> The tradition was continued e.g. via Plato and the Stoics, further with Cusa, Bruno, Kepler, and Leibniz, to Kant, Fichte, and Hegel.

<sup>82</sup> These are generally regarded as material 'self-interest' as the main motivational factor for action, and 'decreasing returns' in agriculture.

as opposed to laws of a "necessary" nature: Only individual things are real, relations are only apparent and fluid.

## **b) Nominalism**

Nominalism has implications for our understanding of society and the social sciences, in particular for sociology - the study of modern society at large,<sup>83</sup> and in particular of the informal aspects of civil society, which constitutes the core study theme of sociology.

Nominalism in social philosophy indicates 'social atomism', that social cohesion is externally forced upon persons. There exists no inner cohesion between persons, morality, that bind them together. Accordingly, institutions, such as nations, have an accidental and haphazard existence. This implies an external point of view in which the world has no internal ordering and rather is accidental, random. Relations or connections between phenomena are seen as based on external properties based on resemblance i.e. more spatial or superficial relations, leading on to formalism and emphasis on measurability and "monetarism" as the practical method (in the sense of analysing most issues in terms of money).

## **c) Nominalism in Economics**

A debate on nominalism and its effects, is completely absent in textbooks in economics. It is generally treated as an "odd" Medieval discussion of "little consequence" today. It was, however, "accidentally" a core issue in the debate between List and the Cosmopolitan School, and re-emerged in the public eye with Lady Margaret Thatcher's famous statement that "there is no such thing as 'society'" (Cf. Thatcher, 1987).<sup>84</sup>

Few economists today have much knowledge of the profound impact of *Nominalism*<sup>85</sup> for the understanding of theoretical questions regarding philosophy of science, and also concerning the role of civil society and therefore has importance for economics.

The economic sociology of e.g. motivation and co-operation is a foundation in economic theory. Schumpeter scorchingly describes the English classical school's treatment of this issue as "unsurpassed in its baldness, shallowness and its radical lack of understanding", <sup>86</sup>

---

<sup>83</sup> Whereas political science tends to be the study of modern societies' more formal organisation, and cultural-anthropology tends to be the study of "traditional societies".

<sup>84</sup> To be fair, the quotation was largely taken out of context by the press, since the intention was that "there is no such thing as 'society'" to be blamed, but rather only responsible individuals can be blamed.

<sup>85</sup> Derived from *nomos* or *nómos* = greek for convention, custom, law.

<sup>86</sup> - after first discussing the French Physiocrats' lack of philosophical and sociological understanding, and then praising the versatility of the economists

... the individual, fleeing from pain and seeking satisfaction, is the scientific nucleus of this strictly rationalist and intellectualist system of philosophy and sociology which, unsurpassed in its baldness, shallowness and its radical lack of understanding for everything that moves man and holds together society, ... It was from this source that many classical economists indubitably derived their sociology ... (Schumpeter, 1912, p. 87)<sup>87</sup>

In the English Classical School of political economy, collective entities like people, society and nations tend to be considered as mere nominal abstractions. Within the Realist camp, however, collective entities have real meanings and functions of their own.

List's adversary in the US was the English born, Thomas Cooper, who was an expressed Nominalist. Accordingly, they regard institutions as fictions, mere 'names'. This tradition of social atomism goes back the Epicureans in ancient Greece.

A very central role in List system is held by the concept of the confederation of labour, which to a large part is constituted precisely by civil society. For List, Civil Society is so to speak constituted within the Confederation of Labour, which again is constituted with the Nation. In his *National System* attacks Smith's Nominalism and -methodological individualism on numerous accounts, e.g. in most of Chapter 31: *The System of Values of Exchange*,

---

of the English Classical School.

<sup>87</sup> A larger extract from Schumpeter reads: "The English classical economists present a different picture. Above all, a definite general trend of ideas, Utilitarianism, has always been associated with their doctrine. In comparison with this the influence of the 'professional philosophers' like Reid and Hamilton meant little and even that of Dugald Stewart receded into the background, though the latter was a 'side line economist' and very successful as a teacher.

The roots of Utilitarianism reach far back, but it was Bentham who first turned it into a vitally influential movement. It is a branch from the tree of Natural Law, but in making this statement we must not forget that it is strictly true only with the assumption that our conception of the Law of Nature is itself accepted. Under the same assumption what has been said about the Law of Nature applies equally to Utilitarianism. The conscious will of the individual, fleeing from pain and seeking satisfaction, is the scientific nucleus of this strictly rationalist and intellectualist system of philosophy and sociology which, unsurpassed in its baldness, shallowness and its radical lack of understanding for everything that moves man and holds together society, was with a certain justification already an abomination to the contemporaries and to an even larger extent to later generations in spite of all its merits. It was from this source that many classical economists indubitably derived their sociology and the means for the satisfaction of their philosophical needs which for the most part were rather modest." (Schumpeter, 1912, p.87 )

See also the sections *Epistemology and the English Classical School*, and *Malthus' heirs in the English Classical School* in chapter 3; and *Natural Rights and 'the selfish system'* in chapter 5.

For him no nation exists, but merely a community, i.e. a number of individuals dwelling together. ... (List, 1841a, p. 348)<sup>88</sup>

This entire nullification of nationality and of State power, this exaltation of individualism to the position of author of all effective power, ... (List, 1841a, p. 349)<sup>89</sup>

Regarding human economics, List argues that the individualist point of view is nothing but an individual shopkeeper's point of view,

... this system at bottom is nothing else than a system of the *private economy of all the individual persons in a country in a country, or of the individuals of the whole human race, as that economy would develop and shape itself, under a state of things in which there were no distinct nations, ...* This system regards everything from the shopkeeper's point of view. (List, 1841a, p. 350)<sup>90</sup>

List's criticism of Adam Smith's methodological individualism is too general, in the sense that he does not explicitly differ between a materialist and an idealist point of view; as in individualism in consumption versus individualism in production (which is more creative, and therefore a better expression of personal individuality).

In his *Outlines* ..., List argues strongly against *Nominalism* as a way of understanding society, such as in chapter 6; *Individual Economy is not Political Economy* (Cf. List, 1827b, ch. 6). Here List contrasts the American System with the English System, the latter illustrated by the extreme free-trade book *Elements of Political Economy* by Thomas Cooper (Cooper, 1826).<sup>91</sup> List's English-American adversary, Professor Thomas Cooper, was also a philosopher, an expressed Materialist and Nominalist, deeply influenced by the philosophy of the nominalist John Locke, and thereby of Thomas Hobbes. Three of Cooper's essays illustrate this, the first and second his materialist and nominalist points of view<sup>92</sup> and the third his "nominalist affiliation" to Locke.<sup>93</sup>

List spends half of chapter 6 of his *Outlines* ... arguing specifically against Thomas Cooper's Nominalism. List quotes Cooper who argues that it is important that we understand that the nation has no real ex-

---

<sup>88</sup> A more extensive quotation may be found in chapter 3, in the section *Smith's system, according to List*.

<sup>89</sup> A more extensive quotation may be found in chapter 3, in the section *Smith's system, according to List*.

<sup>90</sup> A more extensive quotation may be found in chapter 3, in the section *Smith's system, according to List*.

<sup>91</sup> Professor Cooper of South Carolina was originally an Englishman, then a southern secessionist, and highly esteemed by Thomas Jefferson, one of the most central of the US founding fathers.

<sup>92</sup> *The Scripture Doctrine of Materialism* (Cooper, 1831a) and *View of the Metaphysical and Physiological Arguments in favor of Materialism* (Cooper, 1831b)

<sup>93</sup> *Outline of the Doctrine of the Association of Ideas* (Cooper, 1831c)

istence and merely is a name, a convention of speech, a grammatical convention,

"Hence the moral entity - the *grammatical being*, called a nation, has been clothed in attributes metamorphose a word into a thing, and convert a *mere grammatical contrivance* into an existing and intelligent being. It is of great importance that we should be aware of this mistake, to avoid limitation, description and periphrasis - grammatical contrivances and no more; just as we use the sign's and letters of Algebra to reason with, instead of the more complex number they represent." (See p. 19)<sup>94</sup> (List, 1827b, pp. 87-89)

List comments by saying that contrary to what Cooper claims, the nation of the United States is indeed more than a name, and indeed is a reality that has rights and duties and possesses force to upkeep its interests as a legal subject, even at the mouth of a canon,

The more I am convinced of the superior talents and of the great learning of President Cooper, the more I am astonished to see him build up on such false ground, a system of political economy ... Mr. Cooper confounded a *grammatical being with a moral being*, ... With this false foundation the whole system of Mr. Cooper falls to pieces. ... What would Mr. Cooper, as Attorney-General, have said, if the counsel of a defendant had opposed to one of his indictments, that the American nation is a mere grammatical being, ... and which therefore cannot prosecute a lawyer before a court?<sup>95</sup>

## 2.22 Methodological individualism and instrumentalism<sup>96</sup>

One outcome of this Nominalism is an individualistic methodology (Cf. Windelband, 1893, p. 296). According to Nominalism, only individual phenomena really exist. However, Nominalists do use abstraction, and in particular mathematics as in monetary theory. The use of abstraction and generalisations assumes that individual phenomena can be classified into groups, using a taxonomy. But to be true to Nominalism such classification can only be based on external characteristics, and not based on some inner and deeper function or meaning, as in Realism. This differentiation was inherent already in the debate of the Universals in Antiquity and Medieval times.

Nominalism also gives rise to methodological instrumentalism. The nominalist insistence that only individual phenomena are real while still using generalisation, abstractions and laws implies inconsistency, unless one gives up all claims to the truth for scientific theories. When this takes place conceptual nominalism has passed over into

---

<sup>94</sup> Cf. Cooper, 1826, p. 19. (List's note)

<sup>95</sup> A larger quotation may be found in *Appendix 3: Larger quotations from Friedrich List*.

<sup>96</sup> See also the section, *Promoting reductionist individualism - ignoring institutions*, in chapter 3.

methodological instrumentalism, the idea that theories do not pertain to say anything about the real world; they are only practical and convenient tools, (as concepts also are nothing but convenient tools). Claims of any kind concerning “reality”, then turn into claims about stochastic relations, void of any claims to truth, regarding e.g. causal directions. In a Socratic understanding of science and morality this is unethical, since morality requires knowledge. Windelband writes,

4. Thus all courses of Sophistic thought issued in giving up truth as unattainable. Socrates, however, needed truth, and on this account he believed that it was to be attained if it were honestly sought for. Virtue is knowledge; and since there must be virtue, there must be knowledge also. Here for the first time in history the moral consciousness appears with complete clearness as an epistemological postulate. Because morality is not possible without knowledge, there must be knowledge; and if knowledge is not here and now existent, it must be striven for as the lover seeks for the possession of the loved object. Science is the yearning, struggling love for knowledge ... “ (Windelband, 1893, p. 94)

The instrumentalism of ‘as-if’ is nevertheless a precondition for modelling, e.g. when Labour and Capital are regarded as homogenous, as when Marx writes,

The labour, however, that forms the substance of value, is homogeneous human labour, expenditure of one uniform labour-power. (Marx, 1867, Vol. 1, Ch. 1)

The debate over nominalism versus realism has continued in modern times, and in 1980, Mark Blaug attacks the Realists of the Idealist tradition, characterising it as ‘essentialism’,

This is perhaps as good a place as any to say a few more words about the philosophy of *essentialism*, which will raise its ugly head once or twice more in the course of our discussion. Essentialism goes back to Plato and Aristotle for whom knowledge or “science” begins with observations of individual events and proceeds by simple inductive enumeration until grasping by intuition that which is universal in the events - their “essence” – which is then enshrined in a definition of the phenomenon in question. The doctrine that it is the aim of science to discover the true nature or essence of things and to describe them by means of definitions had an enormous influence on Western thought right up to the nineteenth century. Popper contrasts this brand of *methodological essentialism* with the *methodological nominalism* that came into scientific debates with Newton, according to which the aim of science is to describe *how* things behave in various circumstances with the aid of universal laws, and not to determine *what* they really are.

Popper has long argued that essentialism has damaging effects on social theories because it encourages an antiempirical tendency to solve problems by the use of definitions. (Blaug, 1980, p. 125)

Blaug here argues for methodological nominalism, also termed instrumentalism, and that it is sufficient to know *that* the cat actually

catches mice and not *why* it catches mice. This was also the approach of Milton Friedman's instrumentalism (Cf. Friedman, 1953), which dominated economics for a long time afterwards, long after philosophers of science had abandoned it. This problem can be illustrated by statistics, where you may have (external) co-variance of factors, but you will have no way of telling the direction of causation unless you do understand the (internal, essential) reason of causation. To do this you have to understand not only the what, but also the why.

## 3.0 Critic of materialism<sup>97</sup>

### Contents

3.01 Summary	89
3.02 Develop theory against Smith	91
3.03 Smith's system, according to List	92
a) Promoting reductionist individualism - ignoring institutions	93
b) Promoting a passive state – ignoring regulation	94
c) Promoting Free Trade – ignoring the Nation	95
d) Focus on material wealth; Value of exchange	97
e) Promoting a private shopkeeper's system	97
3.04 Materialism ignores mental powers	100
3.05 Material capital - less important	100
3.06 Physiocratic materialism: No-money, barter economics	103
3.07 Counterproductive saving	105
3.08 Introduction of money - hoarding	107
3.09 No gluts in the classical school	108
3.10 Consumption and dissatisfaction is key, not saving	110
3.11 Productive consumption	112
3.12 Smith ignores distribution and consumption	113
3.13 Generalisation and abstraction	115
3.14 The paradox of generalisations – appropriate question	118
3.15 Real estate - the forgotten market	118
3.16 Epistemology and the English Classical School	120
3.17 Towards 'monetarism': The theory of 'values of exchange'	122
3.18 Ricardo's monetary abstraction	123
3.19 Exchange value versus productive powers	125
3.20 Smith's inability to differentiate: Generalisations	127
3.21 Differentiate global- from national economics	127
3.22 Differentiate exchange value from productive powers	128
3.23 Differentiate cause from effect: Mental powers	128
3.24 Differentiate cause from effect: Civilisation	130
3.25 Differentiate cause from effect: Nation	130
3.26 Differentiate cause from effect: History	131
3.27 Smith's short-sightedness 1-4	132
a) Ad 1 and 4): The landed interests - the case of Britain	134
b) Ad 2 and 4): The merchant interests - the Dutch case	135
c) Ad 3 and 4): Public regulation of the merchant interest	135
3.28 Differentiate future from present	138
3.29 Differentiate stages of development: Learning	141
3.30 Differentiate actual from potential	141
3.31 Differentiate raw materials from finished products	147
3.32 Differentiate nations' suitability for industry	147
3.33 Differentiate industries – effects of regulations	148
3.34 Differentiate industries – effects on culture	149
3.35 Differentiate kinds of capital – and labour	150
3.36 Differentiate private versus community interests	152
3.37 Generalisations play down regulation and nation	158

---

<sup>97</sup> A section containing List's criticism of Smith is also found in chapter 7, *Smith as regulator and protectionist*.



3.38 Critic of Malthus' materialism	162
3.39 Roscher, Schmoller and Schumpeter on Malthus	165
3.40 Malthus and the social question - Distribution	167
3.41 Malthus' assumptions	168
3.42 Malthus' heirs in the English Classical School	169
3.43 Edwin Cannan's criticism of Malthus	170
3.44 Materialist reductionism - breeds ignorance	172
3.45 Reductionism and consequences – a contrast	174
3.46 Empirical evidence	175
3.47 Science, technology, – and politics, define resources	177

### 3.01 Summary

List's criticism against Smith can be summarised as criticism of his materialism and tendency to generalise overly, thereby laying the foundation for modern abstraction in economics; the Ricardian Vice; and "monetarism",<sup>98</sup> which led to a myopic exclusion of factors of importance, and an understatement of the need for public regulation.

List claims, that immaterial production factors largely were ignored by the British Classical School, which therefore focused on curtailing population growth, increased division of labour through free trade and on increased accumulation of material capital through saving and austerity. In essence, List argues that ignoring immaterial factors allowed disguising the role of institutions. According to List, precisely England was the nation that more than any had used every trick in the book of government intervention to promote industrialisation and then to prevent other nations from doing the same.

Friedrich List was originally a great admirer of Adam Smith's theories, but practical experience made him revalue.<sup>99</sup> List came to see the basic fault in Smith's system in his nominalism and more basically, in his materialism.

Smith's focus on material self-interest and failure to value immaterial qualities, leads him to make a long range of generalisations about the economic system. These generalisations largely serve to downplay the need for institutions, such as the nation, and government interference in the market is therefore not advisable.

More specifically, when Smith claims self-interest to be the only wealth creative motive, Smith ignores the inner qualities of Man, the intelligence and the morality that creates the inner social cohesion that constitutes the confederation of labour.

---

<sup>98</sup> I.e. "monetisation" of economic theory; using 'money' or 'exchange value', as the common denominator of all factors.

<sup>99</sup> List's criticism is primarily of interest to us here, in order to illuminate List's own ideas. Whether he was correct and objective in his description of Smith is only of secondary interest here.

Smith's nominalism, or social atomism, likewise prohibits Smith of acknowledging this inner social cohesion and confederation of labour.

Smith's nominalism prevents him from recognising institutions and specifically the nation as a reality and an active agent in economic development. Therefore, there is no time in Smith's system and no nations, and accordingly there is no politics, no power, no difference between manufactured goods and raw materials, no difference between branches of production, no difference between nations - such as agricultural and manufacturing nations, no learning, no development, nor any stages of development. Furthermore, there is no difference between public interests and national affairs, and a science of private affairs, a merchant's pecuniary bookkeeping, apply equally well to national affairs.

All in all, Smith's materialism makes him ignore all the nuances and differences that constitute reality, and his policy recommendation accordingly becomes void: *laissez faire*.

Smith argues that the source of wealth is due to the 'external' and 'mechanical' division of labour, which is dependent on the size of the market and on the amount of capital available. The measures to increase wealth therefore are on the one hand free trade, domestically and internationally, and on the other hand saving of capital (austerity measures).

Smith's nominalism leads him to regard everything from an external point of view without being able to recognise inner qualities and quality differences. He therefore generalises and lays the foundation for abstraction as a method.

When Smith only regards wealth as material, he comes to regard money as the abstract numerator that measures an economy's success and or failure. Economics thereby becomes an abstract science of exchange value, a science preoccupied with monetary issues in a superficial manner, rather than a science of the productive forces. Smith is therefore an early creator of 'monetarism' or as List says the true originator of 'the mercantile system'. Smith and Say are only interested in objects and services that are exchangeable on a market and have monetary value. Smith focuses more upon material objects, rather than on immaterial forces of production.

Smith regards wealth as material and the sources as material. This failure to value the inner qualities of Man, leads him to ignore Man's dynamic ability to learn and to innovate, and how this ability has to be nurtured and protected to flourish.

List's criticism against Ricardo is that he makes Smith look like an empirically inclined person in comparison. List's criticism against Say, is that his corrections of Smith are of little importance, since he stayed true to the materialist principle of only recognising exchange value as wealth. List's criticism against Malthus is that he lacks trust in Man's creative capabilities.

Polanyi deepens this criticism by claiming that Malthus and Ricardo used a reductionist method, they reduced Man to an animal, and

thereby put social laws under the laws of nature. Thereby, they contributed to the ideology of radical liberalism that dominated Britain and much of Europe during the late 19<sup>th</sup> Century, and put the social market under the law of the jungle.

### 3.02 Develop theory against Smith

In order to act wisely one must first understand, and List therefore argues that less developed nations must criticise Smith's system, inform the public, publish books, and establish their own doctrine of the American System, also in the universities,

I believe it to be a duty of the general Convention at Harrisburg, not only to support the interests of the wool growers and wool manufacturers, but to lay the axe to the root of the tree, by declaring the system of Adam Smith and Co. to be erroneous — by declaring war against it on the part of the American System — by inviting literary men to uncover its errors, and to write popular lectures on the American System — and, lastly, by requesting the governments of the different states, as well as the general government, to support the study of the American System in the different Colleges, Universities, and literary institutions under their auspices. ...

And if the supporters of the American System are convinced of the superiority of their doctrine, is it not their duty to go on theoretically as well as practically? Ought they not to procure for the people, and especially for the youth of their country, elementary works and professional teachers, explaining the principles of political economy according to their own system, which must ultimately prevail in proportion as the national legislature become convinced of its propriety? (List, 1827b, Letter I, p.19)

This call for action had to some degree been met already before List particularly in US,<sup>100</sup> and was then followed up especially in the then developing nations like the USA, Germany and later Japan (Cf. e.g. Wendler, 1996).

In the USA the tradition of the *American System* was established,<sup>101</sup> and was to some degree continued by the *American Institutional School*.<sup>102</sup>

In Germany the tradition of the Historical Schools was established;<sup>103</sup> was continued after WW I; and to some degree even after WW II.

---

<sup>100</sup> By US economist economists such as: Alexander Hamilton, (1755-1804); Daniel Raymond (1786-1849); Henry Clay (1777-1852); and Mathew Carey (1760-39).

<sup>101</sup> Including economists such as: Henry Carey (1793-1879); Erasmus Peshine Smith; Horace Greeley (1811-1872); Francis Bowen (1811-90); Simon Patten (1852-1922); and Richard T. Ely (1854-1943), (Cf. e.g. Hudson, 1975)

<sup>102</sup> Including economists such as: Thorstein Bunde Veblen (1857-1929); Wesley Clair Mitchell (1874-1948); John R. Commons (1862-1945) and John Kenneth Galbraith (1908-2006)

<sup>103</sup> Including economists such as: Wilhelm Roscher (1817-94), Bruno Hilde-

In Great Britain and the dominions,<sup>104</sup> the Historical School also made a remarkable impression with economists and statisticians.<sup>105</sup>

Furthermore, several European nations established 'historical traditions' of their own before WW I, followed by institutional approaches before and after WW I.<sup>106</sup>

### 3.03 Smith's system, according to List

- The System of Values of Exchange is the true Mercantile System

Most of this section will quote at length chapter 31 of List's *National System: The System of Values of Exchange (Falsely Termed by the School, The 'Industrial' System)* -- Adam Smith.

List's text will only be broken up by my short summary introductions. List here describes Adam Smith's motivation, and he comprises into a few paragraphs Smith's system in its entirety, as understood by List.

---

brand (1812-78) and Karl Knies (1821-98) in the *Older Historical School*, and in the *Younger Historical School*, economists like Albert E.F. Schäffle (1831-03); Georg Hanssen (1809-1894); Lujo Brentano (1844-1931); August Meitzen (1822-1910); Ernst Louis Étienne Laspeyres (1834-1913); Georg Fridrich Knapp (1842-1926); not least Gustav Schmoller (1838-1917); and Karl Bücher (1847-1930), and finally in the Youngest Historical School, economists like Max Weber (1864-1920), Werner Sombart (1864-1941) and Arthur Spiethoff (1873-1957). (Cf. e.g. Grimmer-Solem, 2003)

<sup>104</sup> Especially; Australia with David Syme (1827-1908) (Cf. Groenewegen and McFarlane, 1990), and Canada with Vincent Wheeler Bladen (1900-1981) and Harold Adams Innis (1894-1952). (Cf. e.g. Goodwin, 1961)

<sup>105</sup> Including economists such as: Bonamy Price (1807-1888); John Kells Ingram (1823-1897); James Edwin Thorold Rodgers (1823-90); Thomas E. Cliffe Leslie (1826-1882); Henry Fawcett (1833-1884); Herbert Somerton Foxwell (1849-1936); John Atkinson Hobson (1858-1940) - including historians such as; William Cunningham (1849-1919); Arnold Toynbee Sr. (1852-1883); William James Ashley (1860-1927); Langford Lovell Frederick Price (1862-1950); William Alfred Samuel Hewins (1865 - 1931) and Halford John Mackinder (1861-1947) - and including statisticians, such as: Thomas Tooke (1774-1858); William Newmarch (1820-1882); Leone Levi (1821-1888); Sir Robert Giffen KCB (1837-1910); Sir Arthur Lyon Bowley (1869-1957); and Charles Booth (1840-1916). (Cf. e.g. Coleman, 1987)

<sup>106</sup> Economists with institutional approaches have published e.g. in *Journal of Economic Issues* (JEL) published by *The Association for Evolutionary Economics* (AFEE) in the US; in Europe in the *Journal of Institutional Economics* (JOIE) published by *The European Association for Evolutionary Political Economy* (EAEPE), and more recently in the *Real-World Economics Review* (formerly, the *Post-Autistic Economics Review*) published by the *World Economics Association*.

**a) Promoting reductionist individualism - ignoring institutions<sup>107</sup>**

List praises Adam Smith for founding economics as an analytic science, and claims that precisely this analytic ability of Smith was the very reason that he was unable to see society and its economy in its totality. List refers to Smith's first biographer, Dugald Stewart, who saw this as central part of Smith's personal character (Cf. Stewart, 1793, Section V, and List, 1841a, pp. 351-352).

List in effect therefore accuses Smith of being a reductionist,<sup>108</sup> who reduced society singularly into the motive of self-interest, being unable to maintain a holistic view of society,

Notwithstanding, we would by no means deny the great merits of Adam Smith. He was the first who successfully applied the analytical method to political economy. By means of that method and an unusual degree of sagacity, he threw light on the most important branches of the science, which were previously almost wholly obscure. Before Adam Smith only a practice existed; his works rendered it possible to constitute a science of political economy, and he has contributed a greater amount of materials for that object than all his predecessors or successors.

But that very peculiarity of his mind by which, in analysing the various constituent parts of political economy, he rendered such important service, was the cause why he did not take a comprehensive view of the community in its entirety; that he was unable to combine individual interests in one harmonious whole; that he would not consider the nation in preference to mere individuals; that out of mere anxiety for the freedom of action of the individual producers, he lost sight of the interests of the entire nation. He who so clearly perceived the benefits of the division of labour in a single manufactory, did not perceive that the same principle is applicable with equal force to entire provinces and nations.

With this opinion, that which Dugald Stewart says of him exactly agrees. Smith could judge individual traits of character with extraordinary acuteness; but if an opinion was needed as to the entire character of a man or of a book, one could not be sufficiently astonished at the narrowness and obliquity of his views. Nay, he was incapable of forming a correct estimate of the character of those with whom he had lived for many years in the most intimate friendship. 'The portrait,' says his biographer, 'was ever full of life and expression, and had a strong resemblance to the original if one compared it with the original from a certain point of view; but it never gave a true and perfect representation according to all its dimensions and circumstances.' (List, 1841a, pp. 351-352)

List argues that the Cosmopolitan School argues as if history was made of unrestrained individuals, and that the national wealth simply was an aggregation of individual wealth. We may add that this atomistic

---

<sup>107</sup> See also the section, *Methodological individualism and instrumentalism*, in chapter 2.

<sup>108</sup> Cf. the section below, *Materialist reductionism - breeds ignorance*.

individualism was a natural result of the Smith's nominalism, where social relations and even society and the nation are seen as accidental and haphazard. List on the other hand argues that wealth is a social phenomenon and results from the joint action of a nation, are more particularly the nation's productive powers,

It is a further sophism, arrived at by confounding the theory of mere values with that of the powers of production, when the popular school infers from the doctrine, 'that the wealth of the nation is merely the aggregate of the wealth of all individuals in it, and that the private interest of every individual is better able than all State regulations to incite to production and accumulation of wealth,' the conclusion that the national industry would prosper best if only every individual were left undisturbed in the occupation of accumulating wealth. That doctrine can be conceded without the conclusion resulting from it at which the school desires thus to arrive; for the point in question is not (as we have shown in a previous chapter) that of immediately increasing by commercial restrictions the amount of the values of exchange in the nation, but of increasing the amount of its productive powers. But that the aggregate of the productive powers of the nation is not synonymous with the aggregate of the productive powers of all individuals, each considered separately -- that the total amount of these powers depends chiefly on social and Political conditions, but especially on the degree in which the nation has rendered effectual the division of labour and the confederation of the powers of production within itself -- we believe we have sufficiently demonstrated in the preceding chapters. (List, 1841a, ch. 14, pp. 169-170)

### **b) Promoting a passive state – ignoring regulation**

List claims that, Smith's system is an individualistic denouncing of State power and ability, where the State is only an aggregate of individuals that hinders progress,

In the passage above quoted from Dugald Stewart, Adam Smith's whole system is comprised as in a nutshell. The power of the State can and ought to do nothing, except to allow justice to be administered, to impose as little taxation as possible. Statesmen who attempt to found a manufacturing power, to promote navigation, to extend foreign trade, to protect it by naval power, and to found or to acquire colonies, are in his opinion project makers who only hinder the progress of the community. For him no nation exists, but merely a community, i.e. a number of individuals dwelling together. These individuals know best for themselves what branches of occupation are most to their advantage, and they can best select for themselves the means which promote their prosperity. (List, 1841a, pp. 348-349)<sup>109</sup>

According to the Cosmopolitan School, List writes, what matters for the individual agent is therefore (in the short term) to save money and

---

<sup>109</sup> A part of this quotation has also been used in the section *English Nominalism versus List's Realism*, in chapter 2.

buy cheap from abroad, rather than to waste money on developing productive power (for the long term) and secure the nation's future,

The establishment of powers of production, it leaves to chance, to nature, or to the providence of God (whichever you please), only the State must have nothing at all to do with it, nor must politics venture to meddle with the business of accumulating exchangeable values. It is resolved to buy wherever it can find the cheapest articles -- that the home manufactories are ruined by their importation, matters not to it. If foreign nations give a bounty on the export of their manufactured goods, so much the better; it can buy them so much the cheaper. In its view no class is productive save those who actually produce things valuable in exchange. It well recognises how the division of labour promotes the success of a business in detail, but it has no perception of the effect of the division of labour as affecting a whole nation. It knows that only by individual economy can it increase its capital, and that only in proportion to the increase in its capital can it extend its individual trades; but it sets no value on the increase of the productive power, which results from the establishment of native manufactories, or on the foreign trade and national power which arise out of that increase. What may become of the entire nation in the future, is to it a matter of perfect indifference, so long as private individuals can gain wealth. (List, 1841a, pp. 350-351)

Similarly, List claims (since there was no effective real estate market in England at the time) that the system neither pays regard to the value of land nor to market fluctuations,

It takes notice merely of the rent yielded by land, but pays no regard to the value of landed property; it does not perceive that the greatest part of the wealth of a nation consists in the value of its land and its fixed property. For the influence of foreign trade on the value and price of landed property, and for the fluctuations and calamities thence arising; it cares not a straw. (List, 1841a, p. 351)

### **c) Promoting Free Trade – ignoring the Nation**

According to List, Smith was carried away by the dogma of free trade that he inherited from the Physiocrats and by his lack of empirical investigation to see whether there are reasons to accept this policy. List writes,

Adam Smith's doctrine is, in respect to national and international conditions, merely a continuation of the physiocratic system. Like the latter, it ignores the very nature of nationalities, seeks almost entirely to exclude politics and the power of the State, presupposes the existence of a state of perpetual peace and of universal union, underrates the value of a national manufacturing power, and the means of obtaining it, and demands absolute freedom of trade.

Adam Smith fell into these fundamental errors in exactly the same way as the physiocrats had done before him, namely, by regarding absolute freedom in international trade as an axiom assent to which is demanded by

common sense, and by not investigating to the bottom how far history supports this idea. (List, 1841a, p. 347)

According to List, Dugald Stewart, Smith's biographer, writes that Smith already in 1755 had shaped his theory of governments' unnatural and tyrannical interference with markets and that a minimum state would provide wealth creation best,

Dugald Stewart (Adam Smith's able biographer) informs us that Smith, at a date twenty-one years before his work was published in 1776 (viz. in 1755), claimed priority in conceiving the idea of universal freedom of trade, at a literary party at which he was present, in the following words: 'Man is usually made use of by statesmen and makers of projects, as the material for a sort of political handiwork. The project makers, in their operations on human affairs, disturb Nature, whereas people ought simply to leave her to herself to act freely; in order that she may accomplish her objects. In order to raise a State from the lowest depth of barbarism to the highest degree of wealth, all that is requisite is peace, moderate taxation, and good administration of justice; everything else will follow of its own accord in the natural course of things. All governments which act in a contrary spirit to this natural course, which seek to divert capital into other channels, or to restrict the progress of the community in its spontaneous course, act contrary to nature, and, in order to maintain their position, become oppressive and tyrannical.' (List, 1841a, pp. 347-348)<sup>110</sup>

*The Economist* reveals similar attitudes in our times,

---

<sup>110</sup> Karl Marx proved that List on several occasions misquoted his adversaries (Marx, 1845). Although List here has gotten Smith's message correctly, it does not seem like List has quoted Stewart accurately, perhaps due to translation and re-translation. I therefore quote Dugald Stewart directly: "I am aware that the evidence I have hitherto produced of Mr Smith's originality may be objected to as not perfectly decisive, ... . There exists, however, fortunately, a short manuscript drawn up by Mr Smith in the year 1755, and presented by him to a society of which he was then a member; in which paper, a pretty long enumeration is given of certain leading principles, both political and literary, to which he was anxious to establish his exclusive right;... I should not have even alluded to it, if I did not think it a valuable document of the progress of Mr Smith's political ideas at a very early period. Many of the most important opinions in *The Wealth of Nations* are there detailed; but I shall quote only the following sentences: 'Man is generally considered by statesmen and projectors as the materials of a sort of political mechanics. Projectors disturb nature in the course of her operations in human affairs; and it requires no more than to let her alone, and give her fair play in the pursuit of her ends, that she may establish her own designs.' -- And in another passage: 'Little else is requisite to carry a state to the highest degree of opulence from the lowest barbarism, but peace, easy taxes, and a tolerable administration of justice; all the rest being brought about by the natural course of things. All governments which thwart this natural course, which force things into another channel, or which endeavour to arrest the progress of society at a particular point, are unnatural, and to support themselves are obliged to be oppressive and tyrannical.'" (Stewart, 1793, Section IV)



The most important lesson governments can learn about growth may be that, if they want to promote it, they must give up their desire to control it. (*Economist*, 1995, p.110)

#### **d) Focus on material wealth; Value of exchange**

According to List, Smith tried to make this denouncing of institutions and the Nation plausible by ignoring the dynamic and mental powers, focusing only on static matter. Or in greater detail and with List's terms: This individualism denouncing of the power of the State and of the confederation of Labour, is made plausible by ignoring immaterial forces, therefore institutions and nations - and therefore ignoring power, focusing only on material wealth in its monetary form, and on the accumulation of capital by saving. Since private interest or egotism is the sole creator of monetary wealth, the task of the State is solely to uphold the social order, by supplying peace and justice,

This entire nullification of nationality and of State power, this exaltation of individualism to the position of author of all effective power, could be made plausible only by making the main object of investigation to be not the power which effects, but the thing effected, namely, material wealth, or rather the value in exchange which the thing effected possesses. Materialism must come to the aid of individualism, in order to conceal what an enormous amount of power accrues to individuals from nationality, from national unity, and from the national confederation of the productive powers. A bare theory of values must be made to pass current as national economy, because individuals alone produce values, and the State, incapable of creating values, must limit its operations to calling into activity, protecting, and promoting the productive powers of individuals. In this combination, the quintessence of political economy may be stated as follows, viz.: Wealth consists in the possession of objects of exchangeable value; objects of exchangeable value are produced by the labour of individuals in combination with the powers of nature and with capital. By the division of labour, the productiveness of the labour is increased; capital is accumulated by savings, by production exceeding consumption. The greater the total amount of capital, so much the greater is the division of labour, and hence the capacity to produce. Private interest is the most effectual stimulus to labour and to economy. Therefore the highest wisdom of statecraft consists in placing no obstacle in the way of private industry, and in caring only for the good administration of justice. (List, 1841a, p. 349) <sup>111</sup>

#### **e) Promoting a private shopkeeper's system - a true mercantile system**

The Cosmopolitan School therefore have created a system of private economics, not of political economics as it relates to whole nations. Accordingly, by totally ignoring politics, both in history, now and in the

---

<sup>111</sup> A part of this quotation has also been used in the section *English Nominalism versus List's Realism*, in chapter 2.

future, they do not bother to explain “by what means those nations which are now prosperous have raised themselves”. Nor do they concern themselves with the future of “what means are to be adopted in order to bring the natural powers belonging to any individual nation into activity and value”,

This system everywhere takes into its consideration only individuals who are in free unrestrained intercourse among themselves, and who are contented if we leave everyone to pursue his own private interests according to his own private natural inclination. This is evidently not a system of national economy, but a system of the private economy of the human race, as that would constitute itself were there no interference on the part of any Government, were there no wars, no hostile foreign tariff restrictions. Nowhere do the advocates of that system care to point out by what means those nations which are now prosperous have raised themselves to that stage of power and prosperity which we see them maintain, and from what causes others have lost that degree of prosperity and power which they formerly maintained. We can only learn from it how in private industry, natural ability, labour and capital, are combined in order to bring into exchange valuable products, and in what manner these latter are distributed among the human race and consumed by it. But what means are to be adopted in order to bring the natural powers belonging to any individual nation into activity and value, to raise a poor and weak nation to prosperity and power, cannot be gathered from it, because the school totally ignoring politics, ignores the special conditions of the nation, and concerns itself merely about the prosperity of the whole human race. (List, 1841a, ch. 14, pp. 170-171)

According to List, the result is a consistent system that at bottom is a theory of exchange values (a theory of money), a shopkeeper's theory, with the object of accumulating money instead of a theory of how to improve productive powers,

And hence also it is folly to induce the subjects of a State, by means of State legislative measures, to produce for themselves anything which they can buy cheaper from abroad. A system so consistent as this is, which sets forth the elements of wealth, which so clearly explains the process of its production, and apparently so completely exposes the errors of the previous schools, could not fail, in default of any other, to meet with acceptance. The mistake has been simply, that this system at bottom is nothing else than a system of the *private economy of all the individual persons in a country, or of the individuals of the whole human race, as that economy would develop and shape itself, under a state of things in which there were no distinct nations, nationalities, or national interests -- no distinctive political constitutions or degrees of civilisation -- no wars or national animosities*; that it is nothing more than a theory of values; a mere shopkeeper's or individual merchant's theory -- not a scientific doctrine, showing how the productive powers of an entire nation can be called into existence, increased, maintained, and preserved -- for the special benefit of its civilisation, welfare, might, continuance, and independence. This system regards everything from the shop-

keeper's point of view. The value of anything is wealth, according to it, so its sole object is to gain values. (List, 1841a, pp. 349-350)<sup>112</sup>

This is the real mercantile system, as opposed to Colbert's industrial system, List claims,

The exchange theory of Smith and J. B. Say regards wealth from the narrow point of view of an individual merchant, and this system, which would reform the (so-called) mercantile system, is itself nothing else than a restricted mercantile system. (List, 1841a, p. 354)

Accordingly, List accordingly finds it rather strange that Colbert's national industrial system was termed 'mercantilist' instead of Adam Smith's system with its focus on the value of exchange for the individual shopkeeper,

In short, this system is the strictest and most consistent 'mercantile system,' and it is incomprehensible how that term could have been applied to the system of Colbert, the main tendency of which is towards an 'industrial system' -i.e. a system which has solely in view the founding of a national industry -- a national commerce -- without regarding the temporary gains or losses of values in exchange. (List, 1841a, p. 351)

The reason for the misnaming of 'National Mercantilism' has been discussed e.g. by Lars Magnusson in his *The Tradition of Free Trade* pointing to the origin in France. The tradition was known in Germany as Cameralism and in France as *système Colbert*<sup>113</sup>, but was practiced already by the Phoenicians in the 13<sup>th</sup> Century BC, and most probably before them.<sup>114</sup>

At least starting with Marquis de Mirabeau in 1763, the system was referred to as *système mercantile*, referring to a one specific idea, namely,

... the idea that a nation may profit from an importation of money. ...

As Adam Smith was familiar with Mirabeau's *Philosophic Rurale* (1763) it is highly likely that he picked up this idea from this book. (Magnusson, 2004, p. 70)

---

<sup>112</sup> A part of this quotation has also been used in the section *English Nominalism versus List's Realism*, in chapter 2.

<sup>113</sup> Although the system was certainly older even in France; as it was developed before, under and after Cardinal Richelieu (Cf. e.g. Franklin Charles Palm's *The Economic Ideas of Richelieu*, 1922).

<sup>114</sup> In his classic *History of Phoenicia*, George Rawlinson describes classic mercantilist trade strategies; "Phoenicia expected to derive, primarily, from each colony the commodity or commodities which had caused the selection of the site. In return she supplied the colonists with her own manufactured articles; ... In her trade with the nations who peopled the coasts of the Mediterranean, the Propontis, and the Black Sea, ... Underselling the native producers, she soon obtained a monopoly ... "(Rawlinson, 1889, Ch. IX)

The idea that a nation may profit from having ample supply of trade liquidity (coinage), when paper money was not trusted (often due to weak sovereigns), thus came to characterise the industrial system as 'Mercantilist'.

### **3.04 Materialism ignores mental powers**

List's focus on immaterial factors by far exceeds the emphasis that Adam Smith and Alexander Hamilton put upon them. List says that Smith ignores the intellectual power that lies behind the productive powers,

Adam Smith regarded the physical labour which produces goods having exchange value as the sole source of goods and he failed to examine the origins that enable this work to be done. From this failure came his serious mistake of ignoring the intellectual resources that lie behind the creation of productive powers. (List, 1837a, 186)

List admits that Smith recognised the importance of skills concerning the division of labour, but claims that he failed to develop this insight. The same can be claimed about Alexander Hamilton, who followed Smith here. Hamilton's virtues are to be found elsewhere, namely in his theories of public credit. List claims that Smith sunk into materialism, particularism and individualism by ignoring the mental powers,

Adam Smith has on the whole recognised the nature of these powers so little, that he does not even assign a productive character to the mental labours of those who maintain laws and order, and cultivate and promote instruction, religion, science, and art. His investigations are limited to that human activity which creates material values. With regard to this, he certainly recognises that its productiveness depends on the 'skill and judgment' with which it is exercised; but in his investigations as to the causes of this skill and judgment, he does not go farther than the division of labour, and that he illustrates solely by exchange, augmentation of material capital, and extension of markets. His doctrine at once sinks deeper and deeper into materialism, particularism, and individualism. (List, 1841a, p. 137)

List writes that in addition to using a rationalistic and anti-empirical method, the Cosmopolitan system has adopted materialistic axioms and consequently cannot fathom the science of productive powers, whose subject matter is the material and immaterial foundation of any nation List.<sup>115</sup>

### **3.05 Material capital - less important**

---

<sup>115</sup> Cf. List, 1837a, pp.180-181, quoted below in the section, *Epistemology and the English Classical School*.

List criticises Smith's understanding of capital as being much like that of an accountant who think in terms of aggregated capital, without considering this real world of mental and bodily abilities. It is a static world.

The focus of List's argument was to improve the productive powers of a nation, to cultivate the tree that would bring fruits in the future. Stronger productive powers would later secure tax-revenues for the fiscal budget far greater than the original cost of the protection for the public. In other words, the costs of protection were seen as an investment. To improve the productive powers, List advocated strengthening mental and bodily abilities and powers, in a dynamic world of learning. List writes,

It is firstly to be remarked in opposition to this reasoning, that Adam Smith has merely taken the word capital in that sense in which it is necessarily taken by rentiers or merchants in their book-keeping and their balance-sheets, namely, as the grand total of their values of exchange in contradistinction to the income accruing therefrom.

He has forgotten that he himself includes (in his definition of capital) the mental and bodily abilities of the producers under this term.

He wrongly maintains that the revenues of the nation are dependent only on the sum of its material capital. His own work, on the contrary contains a thousand proofs that these revenues are chiefly conditional on the sum of its mental and bodily powers, ... (List, 1841a, p. 226)

In List's *Outlines of American Political Economy* (Cf. List, 1827b), List claims that material capital is not as omnipotent as Say and Smith claim, and since most capital is mental – intellectual and social – there is no restriction of productive force due to scarcity of capital,

It is not true that the productive power of a nation is restricted by its capital of matter. Say and Smith having only in view the exchange of matter for matter, to gain matter, ascribe to the matter an omnipotent effect which it has not. Greater part of the productive power consists in the intellectual and social conditions of the individuals, which I call capital of mind. (List, 1827b, p. 63)

In List's later books, *Natural System* (Cf. List, 1837a) and *National System* (Cf. List, 1841a), the translations of List's concept of *Geistiges Kapital*<sup>116</sup> do not use the term "capital of mind" but instead use the term "Mental Capital".<sup>117</sup> In any case, he continues to point to the importance of immaterial production factors.

List claims that Smith got the issue of capital wrong because of his narrow material focus. List counters the claim of capital scarcity, by emphasising that most capital is capital of mind, the intellectual re-

---

<sup>116</sup> Literally translated as 'spiritual capital'.

<sup>117</sup> The concepts of 'mental capital' and 'human capital' have been dealt with in several sections in chapter 4: *Capital of mind*; *Accumulated capital of mind*; *Human Capital*; *Knowledge and information economics*; etc.

sources, and increasingly so in industrialised nations. Lists claims that the growing importance of capital of mind will cause capital of matter to accumulate increasingly fast, making Smith's argument even less relevant,

... how far wrong Smith and Say are in asserting that capital of matter increases only slowly. (List, 1827b, p. 29)<sup>118</sup>

This was true in former times when industry was checked in every way, when the new powers of chemistry, of mechanics, etc. etc., were not yet in existence; it was true in old settled countries, where nearly all natural means were already used; but it is not true in a new country, where not the tenth part of the capital of nature is in use, where new inventions do wonders, where industry is delivered of all hindrances, where in short a new state of society has formed a capital of mind never experienced. If population increases in such a [new] country in a degree never experienced, the increase of capital of matter will outstrip even the increase of population, if the community be wise enough to employ its capital of mind in order to develop and use the capital of nature with which it is blessed. (List, 1827b, p. 67)

The speedy recovery of Japan and Germany after the utter devastation during WW II may be a good illustration of this point, as with South-Korea after their war.

When Sebastian Dullien contests that lack of capital is a limiting factor to growth in less developed economies, as is often claimed in modern textbooks, he could have connected himself to a tradition that at least goes back to List. Dullien writes,

Most of the standard macroeconomic textbooks<sup>119</sup> today argue in the exposition of long-run growth that the central limiting factor to economic development is the lack of capital endowment in less developed countries. This conclusion is usually reached both using a traditional neoclassical growth framework based on Solow (1956) seminal work as well as modern endogenous growth models which broaden the term "capital" to explicitly include human capital and knowledge capital. (Dullien, 2009, p. 2)

---

<sup>118</sup> (6) *Capital of matter. . . slowly*. Smith, "Wealth of Nations," II. chap. iii. "The progress is frequently so gradual that, at near periods, the improvement is not only not sensible, but . . . there frequently arises a suspicion that the riches and industry of the whole are decaying." Also Say, "Principles," I. chap. ii. "The increase of capital is naturally slow of progress; for it can never take place without actual production of value, and the creation of value is the work of time and labour besides other ingredients." (List's note)

<sup>119</sup> For example, Mankiw (2006), but also Romer (2007) or Barro and Sala-I-Martin (2003). Note, however, that textbooks which explicitly focus on development economics such as Thirwall (2006) or Todaro and Smith (2003) focus much less on the neoclassical growth model. (Dullien's note)

### 3.06 Physiocratic materialism: No-money, barter economics

The classical school has often been accused of being a study primarily of a barter economy. Ironically, and somewhat puzzling, although Ricardo was a 'money-changer' by birth and occupation, he used the Physiocratic notion of a farm based on barter as model for a national market economy. Although Ricardo did mention money in his *Principles*, we cannot say that this was a central part of his theory, whether in its early- or late versions.

As mentioned, List criticises Smith for ignoring immaterial factors, and therefore institutions like the nation. For much the same reason, Smith also has a materialistic view of capital and money, and concludes that growth depends upon saving, in principle an austerity policy.

Although the financial sector had been thoroughly studied by Mercantilists like Mun, Malynes, Child, Locke, Newton, Steuart, it was forgotten with Smith and the Classical school, and for which Thornton criticised them in 1802. What List wrote in 1841a, was supported by others also regarding finance,

Adam Smith's doctrine is, in respect to national and international conditions, merely a continuation of the physiocratic system. (List, 1841a, p. 347)

Smith, and then Ricardo, in essence took over the economic model of the Physiocrats based on barter with corn. The Labour Fund theory is one illustration of this, corn must be saved to feed the next season of labourers. The title of the neo-Ricardian Piero Sraffa's book is tellingly in this tradition; *Production of Commodity by Means of Commodities* (Sraffa, 1960).

Like the Physiocrats Smith tends to regard capital as matter, 'stock' as in 'stockroom' and storage room. Adam Smith often writes of money and capital as 'stock'. Edwin Cannan, the editor of the 1904 "definitive" version of *The Wealth of Nations*, writes in his article *Early History of the Term Capital* that Smith often mixes and confuses the usage of these terms,

Instead of making the capital a sum of money which is to be invested, or which has been invested in certain things, Smith makes it the things themselves. Instead of being a sum of money expended on the acquisition of stock, it is part of the stock itself. But the change is not pointed out to the reader in anyway, and Smith was doubtless quite unconscious of having made it. He constantly drifts back into expressions which are only appropriate to the older conception. ... If Smith had recognized ... much subsequent confusion would have been avoided. (Cannan, 1921)

This view of capital as stock, affects his view of capital as something that must be saved, stored in a stock in advance, before investments can be made. This materialist view of capital is then used on capital as

money; money is material and must be stocked and saved in order to achieve growth.

In essence, the material 'stock' view of capital and money is a remnant from a pre-financial barter economics. In a market economy, however, money is an institution based in legal relations. Money – 'value in exchange' – is relatively easy to measure, but money is not a 'stock' or a material thing, as Smith evidently thought. Money is an idea, since it denotes an institutionalised debt relationship. Unlike a true barter economy, a market economy has institutionalised credit and thereby a financial economy at its core.

The financial market consists of debt relationships, claims accounting, which by definition consists in social and institutional relations, which in essence are 'ideal' relations or 'mental' relations.

The financial system is a record of the claims to resources, including the results of production, and exists in parallel to the social and material system of production. National authorities are supposed to regulate these two parallel systems so that claims and production balance.

Money is an impersonal and universalised kind of credit, and as such, it is an accounting concept. From a bank's point of view and even more from a nation's point of view, money is nothing one has to save in order to create investment. Money is an idea, an idea that can be created out of thin air or in cyberspace – and it can evaporate into thin air – or in cyberspace.

This issue influences policies on crucial matters like currencies, balance of payments, debts, savings, pensions, and investments which "main stream" tend to believe concern material matters rather than ideas, immaterial and ideal matters, or more precisely institutional, relational and judicial phenomena.

Like Smith who insists on accumulating capital by saving, many economists are stuck in the conceptions of a barter economy, having not grasped 'in practice' that a market economy essentially is dependent on a financial economy, where new debt relationships involving money can be created at will. As we shall see below, the misunderstanding of the act of saving will illustrate this point. To be somewhat in progress of this and hint at one important issue, we may look at economic pension policies. Future retirees will have to live off future production, and to render this possible a nation has to invest today in order to produce tomorrow. Instead, today's policies largely consist in 'saving' in (private and public) funds that invest in the established and "secure" bonds, stocks and real estate. This contributes to asset inflation, which is a costly burden on production, thereby undermining tomorrow's pensions. In other words, lacking a simple and fundamental analysis most pension policies, advised by economists, are directly counterproductive.

There is another flaw in Smith's analysis. When he asserts that funds must be saved in order to provide capital for the labourer, he assumes away the time that is needed for saving (and 'storing' this capital stock),



and instead assumes instant exchanges. Some Capital is therefore withdrawn from circulation, creating a relative shortage in demand.<sup>120</sup>

### 3.07 Counterproductive saving

Adam Smith argues that growth in wealth comes from enlarged markets that allow further division of labour, which can be aided by free trade. The second source of growth of wealth is growth in capital, which only come from savings. List criticises Smith's theory of capital and growth, and quotations Smith such,

The industry of the community can only be augmented in proportion as its capital increases, and the capital of the community can only increase in accordance with the savings which it gradually makes from its income. (*Wealth of Nations*, book IV, ch. ii) (List, 1841a, p. 225)<sup>121</sup>

Smith also says that parsimony and not industry increases capital,

As the capital of an individual can be increased only by what he saves from his annual revenue or his annual gains, so the capital of a society, which is the same with that of all the individuals who compose it, can be increased only in the same manner.

Parsimony, and not industry, is the immediate cause of the increase of capital. Industry, indeed, provides the subject which parsimony accumulates. But whatever industry might acquire, if parsimony did not save and store up, the capital would never be the greater. (Smith, 1776, book II, ch. III)

---

<sup>120</sup> Smith must either assume away time needed for saving enough capital, or he must assume that the saved capital immediately can be used to buy suitable fixed capital, meaning that the extra capital needed is infinitesimal small, and that this is so for all producers. Obviously either assumption is empirically wrong, time exists and some investments are large. Therefore, some purchasing power is always and in an increasing degree withheld from demand, thereby creating increasing deflation. This relation tends to make underconsumption (and deflation) a chronic state.

Other factors pull in the opposite direction, creating inflation, such as unproductive creation of credit. An effective financial sector may, however, only partly ameliorate the problem, by lending 'our' manufacturer's saved capital to other users until he has enough capital to make the purchase.

<sup>121</sup> Again List fails to quote correctly, but this may be due to the translation into German and then back into English, and also due to differences in the handful editions of Smith's *Wealth of Nations*. In any case, the meaning is correct. This is Smith's original text: "The industry of the society can augment only in proportion as its capital augments, and its capital can augment only in proportion to what can be gradually saved out of its revenue." (Smith, 1776, book IV, ch. II) A more extended quotation can be found in chapter 3 under *Differentiate actual from potential – irrelevance of natural advantages*.

List comments Adam Smith's theory of growth, accumulation and saving, saying that it is a private theory of a private rentier rather than that of a nation,

He reduces the process of the formation of capital in the nation to the operation of a private rentier, .... who can only increase his income by savings which he again turns into capital.  
... this theory of savings, .... if followed by a whole nation must lead to poverty, ..., the mental power required for production vanishes. .... Where everyone saves and economises as much as he possibly can, no motive can exist for production. ... The building up of the material national capital takes place in quite another manner than by mere saving as in the case of the rentier, namely, in the same manner as the building up of the productive powers, ... (List, 1841a, pp. 227-228)<sup>122</sup>

In the section, called *When Saving is Injurious* Roscher says that,

The act of saving, if the consumption omitted was a productive one, is detrimental to the common good; because a real want of the national economy remains unsatisfied. (Roscher, 1877, § CCXX)

This insight was also realised before List by e.g. Friedrich II of Prussia, who in his *L'Anti-Machiavel* wrote,

Any private individual and any king who does nothing but pile up and bury money, understands nothing of the art of enrichment: it is necessary to make the money circulate to be really rich. (Friedrich II, 1740, ch. xvi)

Later, a number of economists such as Ragnar Frisch have understood this,<sup>123</sup>

It is only by a productive arrangement that society as a whole can implement saving. (Frisch, 1947)

Terence Hutchison notifies us that also Eugen Böhm von Bawerk in his classic analysis, *Positive Theory of Capital* (Cf. Böhm-Bawerk, 1889) reversed Adam Smith's understanding of capital and growth, but he then slipped back into Smith's error. The error was, Hutchinson writes, that Böhm-Bawerk "was dealing with the case where all savings in a period are invested and there is full employment". In other words, Böhm-Bawerk ignored the possibility of 'hoarding' and unemployment, which precisely is what make these issues both difficult and interesting. Hutchinson writes,

---

<sup>122</sup> An extended quotation may be found in Appendix 3.

<sup>123</sup> Cf. *Appendix 4. Underconsumption and credit*, which is also highly relevant for a discussion of insufficient demand and in particular the section, *Underconsumption*.

Böhm-Bawerk closes this part of his work with a section on the formation of capital, or saving and investment. For the formation of capital the negative element of saving must be joined by the positive element of investing, or employing intermediate products, (p. 139.) Not only does Böhm-Bawerk distinguish the two processes in this way, but he corrected Adam Smith's long dominant dictum that 'parsimony and not industry is the immediate cause of the increase of capital'. 'To be correct', Böhm-Bawerk emphasizes, 'this must be precisely reversed. The direct cause for the existence of capital goods is production, the indirect cause is the previous saving.' However, after this promising emphasis Böhm-Bawerk reverts to the Smithian concept of the invariable (or inevitable) linking of saving and investment. He examines what happens in a free market economy when aggregate saving increases. ... (pp. 149-50.) ...

Without any particular warning as to any degree of abstraction involved, Böhm-Bawerk, as we shall see again later, was dealing with the case where all savings in a period are invested and there is full employment. (Hutchison, 1953, p. 63-64)

### **3.08 Introduction of money - hoarding**

The introduction of money as an exchange medium, made market transactions and resource allocation more efficient than a barter economy. However, by the introduction of money as an intermediate between production and consumption, potential disturbance is introduced. because money is also allowed to serve other purposes that conflict with its role as a clearing tool for markets.

When money serves several roles, it brings with it a potential for disruption of the whole economic system. This happens if money is allowed to leave the circulation process between production and consumption. The intended role as a claim on production then ceases. This money becomes 'dead' instead of serving as an active medium. This was a point Malthus made, and the central point of the many monetary heretics in the interwar period, in the 1920s and 1930s.

As noted by Roscher, financial investments are a kind of sterile storage until channelled into consumption of kinds. When, however, money is channelled into 'non-productive' and 'non-consuming' speculation, in e.g. established financial assets or established real estate; it is still sterile and only potential. Its role as a claim on production has still not been activated. This is a potential disturber of the peaceful balance and equilibrium in the model of the classical school. The money heretics pointed out that this disturbance was due to the different roles of money, as exchange medium, as value measurer, and as wealth storage medium.

These different roles are repeatedly pointed out in textbooks, but the inherent potential for conflict is glossed over to the degree that it is not mentioned at all. The conflict is non-existent, it is assumed.

Roscher follows Malthus' argument and says quite plainly that the invention of money renders the abstract theory (of Ricardo, J.S. Mill and J-B. Say) useless, since hoarding of money reduces demand for production,

Lastly, the mere introduction of trade by money destroys as it were the use of the whole abstract theory. [Footnote: *Malthus*, Principles, II, ch. I, 3] So long as original barter prevailed, supply and demand met face to face. But by the intervention of money, the seller is placed in a condition to purchase only after a time, to postpone the other half of the exchange-transaction as he wishes. Hence it follows that supply does not necessarily produce a corresponding demand in the real market. And thus a general crisis may be produced, especially by a sudden diminution of the medium of circulation.' And so, many very abundant harvests, which have produced a great decline in the value of raw material, and no less so a too large fixation capital which stops before its completion,' may lead to general overproduction. In a word, production does not always carry with itself the guaranty that it shall find a proper market but only when it is developed in all directions, where it is progressive and in harmony with the whole national economy. ... There will be a stagnation of the entire business, because part of its capital is paralyzed, and all the workmen will suffer damage.<sup>124</sup> (Roscher, 1877, Book IV, Ch. I, § CCIX)

### 3.09 No gluts in the classical school

List (and Roscher) paid much attention to the causes and effects of disruptions of consumption and production, and List complains that Smith's followers never bothered to investigate the sources and effects of commercial crises,

Through their position as the manufacturing and commercial monopolists of the world, their manufactories from time to time fall into the state which they call 'glut,' and which arises from what they call 'overtrading.' ....The English nation merely sees the fire and hears the report of the explosion; the fragments fall down in other countries, ... ... The prevailing economical school has never deemed it expedient to elucidate the causes and effects of such commercial crises. (List, 1841a, pp. 146-147. On dumping, see also p. 299, quoted above)

Adam Smith and the main stream of the Classical School tended to ignore both the existence and the explanation of commercial crisis, such as theories of phenomena like oversaving, over-accumulation, overproduction, underconsumption, and under-spending. A reason was the crisis of this kind was illogical according to Smith's system, since it

---

<sup>124</sup> On the special pathology and therapeutics of this economic disease, compare *Roscher*, Die Produktionskrisen, mit besonderer Rücksicht auf die letzten Jahrzehnte in die Gegenwart, Brockhaus, 1849, Bd. III, 721 ff., and his Ansichten der Volkswirtschaft, 1861, 279ff. (Roscher's footnote)

would imply a surplus of capital, and of money, that were not directed into efficient demand.

As we have seen, this is rooted in Smith's view of capital as material, a stock to be saved - as opposed to the view of Capital as an idea - a legal institution for the accounting of debt- and credit relations.

Smith saw the problem of growth as insufficient capital and argued in favour of increased accumulation of capital. Over-accumulation of capital was therefore not likely. In the tradition after Smith, instability as a result of over-accumulation or hoarding of money was thereby more or less ignored.

Moreover, since Smith and his followers largely ignored distribution and consumption, there was logically and consequently no search for-, nor any observation of any such mismatch between production and consumption. The classical school was thereby unable to explain certain instability phenomena related to consumption or rather the lack of it - underconsumption. The flip of the coin to over-accumulation is underconsumption and therefore declining investments, -growth; -employment of Labour and Capital, -tax-revenue, and -welfare.

Henry Fawcett (Marshall's predecessor at Cambridge) has left us one example of the classical mode of thought following Say's Law of market equalisation: Products will always find consumers. Fawcett neglects the financial sector, in particular credit based consumption, which List pointed to. Fawcett furthermore, believes in the self-equalising markets through of the price mechanism. Fawcett writes in the classic belief that prices are infinitely flexible, that consumption and investment is price-flexible, that banks will give credit also in a crisis, and that capital always will be reinvested in production of some sort - immediately. This contrasts e.g. with Hilferding's concept of fallow or idle capital (Cf. Hilferding, 1910, ch. 4), and contrasts e.g. with the experience during the banking crisis in 2008. Fawcett writes,

All political economists who preceded James Mill and Ricardo, and many who have succeeded them, seem to anticipate a general over-production of commodities as a possible or even probable contingency. Dr Chalmers and Mr Malthus went so far as to impress upon all, the duty of exercising a moral restraint with regard to the accumulation of capital; for if this was not done, they feared that wealth would not only be created to be wasted, and that it would be impossible to consume a great portion of the commodities produced. Sismondi was actually opposed to the use of machinery, because he believed that if the production of wealth was so much facilitated there would inevitably ensue a general over-production of all commodities. ... yet it can be proved that there never has been, and never will be, overproduction in the sense that more commodities are produced than people will consume. ...there would be no difficulty whatever in selling the goods if they were only offered at a sufficiently low price. ...

It therefore appears that, however great may be the accumulation of capital, commodities are sure not to be produced to be wasted; there will always be persons ready to consume the commodities which are produced, if the price at which they are sold is sufficiently low. Consequently the accumulation of capital, as pointed out in the last chapter, may reduce profits, but never causes a superfluous production of capital. (Fawcett, 1883, ch.6, pp.472-476)

### **3.10 Consumption and dissatisfaction is key, not saving**

Consumption holds a key role in List's system, saving does not. It is commonplace to regard List as a production oriented economist. This is only partially correct, since List never stops reminding the reader of the tight connection between activities and the need for balance between them. He therefore often pointed out the crucial role of consumption.

List argues that social inequality and public display of it spurs individual efforts to rise in consumption and thereby in social standing. Difference in social rank act as an inducement and stimulus to exertion, inventiveness, and cause a nation to improve its productiveness,<sup>125</sup>

What immense performances in both mental and material production arise out of the endeavour to move in better society!

We can live as well in a house made of boards as in a villa, we can protect ourselves for a few florins against rain and cold as well as by means of the finest and most elegant clothing. Ornaments and utensils of gold and silver add no more to comfort than those of iron and tin; but the distinction connected with the possession of the former acts as an inducement to exertions of the body and the mind, and to order and thrift; and to such inducements society owes a large part of its productiveness. (List, 1841a, p. 303)

List argues that the opportunity for the individual to raise oneself in social rank is the most potent stimulus a political system can give its economy, whereas a lack of opportunity produces idleness,

Among the most potent stimulants are those afforded by the civil and political institutions of the country. Where it is not possible to raise oneself by honest exertions and by prosperity from one class of society to another, from the lowest to the highest; ... , there the most important motives for consumption as well as for production are wanting. (List, 1841a, p. 303)

... restrictions on luxury have destroyed wholesome emulation in the large masses of society, and have merely tended to the increase of mental and bodily idleness. (List, 1841a, p. 306)

---

<sup>125</sup> See also the section, *Colonies, division of labour and free trade*; under the subsection, *Colonial goods as a catalyst for activity*, in chapter 7.

Production is a tool, to enable consumption, but not for material reasons alone. In List's view, production is also a tool in a non-economic sense, because production elevates civilisation. Therefore, elevation of civilisation is the goal, consumption and production are only intermediate tools, of which consumption is primary; Trigger consumption and human inventiveness will produce. Triggering in particular the consumption of luxury products, and human inventiveness will produce the most exquisite products.<sup>126</sup>

Consumption therefore holds the primary role and production holds the secondary role.

### Consumption and the Balance of Trade - and Debt

In sharp contrast to Smith (Smith, book IV, ch. II, part II), List is also extremely focused on the importance of a balance of trade. This balance parallels in the exterior trade the domestic trade balance between consumption and production.

List's trade theory or more precisely his argument for protection is not for the protection of production. No, in the first instance it is consumption that needs to be protected: Production needs to be demanded through consumption, in order to complete and continue the economic circulation process. List's whole argument for the creation, maintenance and protection of the home market is based on the key role of consumption, within the economic system as a circulating process,

Production renders consumption possible, and the desire to consume incites to production. The mere agricultural nation is in its consumption dependent on foreign conditions, and if these are not favourable to it, that production dies out which would have arisen in consequence of the desire to consume. But in that nation which combines manufactures with agriculture in its territory, the reciprocal inducement continually exists, and therefore, also, there will be continuous increase of production and with it augmentation of capital on both sides. (List, 1841a, p. 233)

One of Roscher's chapters has the telling heading *Necessity of the Proper Simultaneous Development of Production and Consumption* (Roscher, 1877, Book IV, Ch. I, § CCXV). After a discussion of the two phenomena, he claims that consumption and production must balance (!),

There is no production possible without consumption. (Roscher, 1877, § CCXI)

---

<sup>126</sup> This issue was Werner Sombart elaborated on this issue in 'Luxury and Capitalism' (Sombart, 1913)

Hence, one of the most essential conditions of a prosperous national economy is that the development of consumption should keep equal pace with that of production, and supply with demand. (Roscher, 1877, § CCXV)

List argues that often consumption precedes production by using credit and that this has made agricultural nations indebted to manufacturing nations and likewise domestically, credit: This has made the agricultural countryside indebted to manufacturing cities, and stimulates the agriculturalist to greater production,

In any case products must be created before they can be consumed, and thus production must necessarily generally precede consumption. In popular and national practice, however, consumption frequently precedes production. Manufacturing nations, supported by large capital and less restricted in their production than mere agricultural nations, make, as a rule, advances to the latter on the yield of future crops; the latter thus consume before they produce -- they produce later on because they have previously consumed. The same thing manifests itself in a much greater degree in the relation between town and country: the closer the manufacturer is to the agriculturist, the more will the former offer to the latter both an inducement to consume and means for consumption, the more also will the latter feel himself stimulated to greater production. (List, 1841a, p. 306)

### **3.11 Productive consumption**

In the chapter *The Manufacturing Power and the Inducement to Production and Consumption*, List argues that creation of inducement to consumption is a productive activity,

In society man is not merely productive owing to the circumstance that he directly brings forth products or creates powers of production, but he also becomes productive by creating inducements to production and to consumption, or to the formation of productive powers. (List, 1841a, p. 303)

List argues that unproductive consumption may be productive, or more precisely, unproductive consumption in a small setting may be productive in a larger setting. This happens when e.g. consumption for education incites production in the future, thereby increasing the national productive force,

The greatest portion of the consumption of a nation is used for the education of the future generation, for promotion and nourishment of the future national productive powers. (List, 1841a, p. 139)

This also happens when consumption incites new production more immediately, thereby increasing the national productive force,

We cannot agree with the defenders of unproductive expenditure, namely of that incurred by wars and the maintenance of large armies, nor with



those who insist upon the positively beneficial character of a public debt; but neither do we believe that the dominant school are in the right when they contend that all consumption which is not directly reproductive - for instance, that of war - is absolutely injurious without qualification. The equipment of armies, wars, and the debts contracted for these purposes, may, as the example of England teaches, under certain circumstances, very greatly conduce to the increase of the productive powers of a nation. Strictly speaking, material wealth may have been consumed unproductively, but this consumption may, nevertheless, stimulate manufacturers to extraordinary exertions, and lead to new discoveries and improvements, especially to an increase of productive powers. This productive power then becomes a permanent acquisition; it will increase more and more, while the expense of the war is incurred only once for all.<sup>127</sup> And thus it may come to pass, under favouring conditions such as have occurred in England, that a nation has gained immeasurably more than it has lost from that very kind of expenditure which theorists hold to be unproductive. (List, 1841a, p. 55)

Wilhelm Roscher also asserts that consumption may be productive,

There are different degrees of productiveness in consumption also. ... (Roscher, 1877, § CCXI)

Likewise, in his *A Study in Public Finance*, Arthur Cecil Pigou therefore argues that with the realisation that much consumption is an investment in human capital, especially concerning children, then the delineation between productive investment and unproductive consumption becomes blurred,

There is such a thing as investment in human capital as well as investment in material capital. So soon as this is recognised, the distinction between economy in consumption and economy in investment becomes blurred. For, up to a point, consumption is investment in personal productive capacity. This is especially important in connection with children: to reduce unduly expenditure on their consumption may greatly lower their efficiency in after-life. Even for adults, after we have descended a certain distance along the scale of wealth, so that we are beyond the region of luxuries and "unnecessary" comforts, a check to personal consumption is also a check to investment. (Pigou, 1928, p. 29)

### 3.12 Smith ignores distribution and consumption

In List's system, individual dissatisfaction and consumption is the driver of individual efforts to elevate one's social standing (Cf. List, 1841a, p. 303). List often discusses the need to secure stable consumption, in order to secure production and the productive forces. He repeatedly discusses disruptions of consumption, especially abroad since these markets were under foreign command, and outside the range of domes-

---

<sup>127</sup> (List's note, omitted here)

tic control. List' intent was to bring these markets 'home" and "domesticate" them, in order to get them under control.

Therefore, List argues that development of stable and uninterrupted domestic consumption is important to secure domestic production, both in manufacture and in agriculture.

In like manner the entire manufacturing industry of a State in connection with its agricultural interest, and the latter in connection with the former, will prosper the more the nearer they are placed to one another, and the less they are interrupted in their mutual exchanges with one another. The advantages of their confederation under one and the same political Power in times of war, of national differences, of commercial crises, failure of crops, &c., are not less perceptible than are the advantages of the union of the persons belonging to a pin manufactory under one and the same roof. (List, 1841a, p. 151)

In footnote 8, also Roscher declares that Adam Smith neglected consumption,

The necessity of an equilibrium between production and consumption was pretty clear to many of the older political economists. Thus, for instance, *Petty* calls the coarse absence of the feeling of higher wants among the Irish the chief cause of their idleness and poverty. Similarly *Temple*, .....According to *Berkeley*, ... the awakening of wants is the most probable way to lead a people to industry. And so *Hume*, ... The Physiocrats were in favor of active consumption. ...

The moderns have frequently inequitably neglected the doctrine of consumption. Thus it appears to be a very characteristic fact that in *Adam Smith's* great book, there is no division bearing the title "consumption" and in the Basel edition of 1801, that word does not occur in the index. *Droz* says that in reading the works of certain of his followers, one might think that products were not made for the sake of man but for their own sake. But on the other hand there came a strong reaction with *Lauderdale* ... *Sismondi* ... *Ganilh* ... but especially, and with important scientific discoveries, *Malthus* ... *St. Chamans* ... And so according to *Carey*, Principles, ch.35, § 6, the real difficulty does not lie in production but in finding a purchaser for the products. But he overlooks the fact here that only the possessor of other products can appear as a purchaser. From another side, most socialists think almost exclusively of the wants of men, and scarcely consider it worth their while to pay any attention to the means of satisfying them. (Roscher, 1877, § CCXVn)

In the *Editorial Introduction* to the *Wealth of Nations*, Edwin Cannan says that Smith here, as opposed to in his *Lectures*, ignored consumption and distribution and thereby started at least a century of ignorance,

Besides consumption, two other subjects, stock-jobbing and the Mississippi scheme, which are treated at some length in the lectures, are altogether omitted in the *Wealth of Nations*. (Cannan, 1904, p. 1.45)

These changes do not make so much real difference to Smith's own work as might be supposed;... the theory of distribution, though it appears in the title of Book I., is no essential part of the work and could easily be excised by deleting a few paragraphs in Book I., chapter vi., and a few lines elsewhere; if Book II. were altogether omitted the other Books could stand perfectly well by themselves. But to subsequent economics they were of fundamental importance. They settled the form of economic treatises for a century at least. (Cannan, 1904, p. 1.49)

### **3.13 Generalisation and abstraction**

List praises the Cosmopolitan system for restoring to industry a central role in economic theory, but criticises its unrealistic and dogmatic materialism. The economists of the Cosmopolitan system first assert a principle, free trade, they then look for facts that fit that preconceived conclusion, and consciously ignore facts such as the existence of nations, national rivalry and wars. Instead, they should have researched how to unite the productive powers of individuals to their mutual advantage. By ignoring reality, their conclusions are worthless, List says,

We now come to the "cosmopolitan system". We can think of no better name for the doctrines advocated by Adam Smith and J. B. Say. The supporters of these doctrines recognise that the arguments of the Physiocrats are untenable and they have restored industry to its rightful place in the economy. And they have shown that industry is mainly responsible for the development of a prosperous agriculture.

Blinded by the cosmopolitan doctrine of free trade the supporters of the "cosmopolitan system" have taken the wrong road to achieve their purpose. They have fallen into the same trap as the Physiocrats by first asserting a principle and then looking for evidence to support it. They have not appreciated the significance of the fact that humanity is divided into various nations, each with its own individuality. They have failed to recognise the existence of a problem posed by nature itself - namely how to unite the "productive powers" of all individuals so that they can pursue a common goal to their mutual advantage. Since such unwelcome facts are incompatible with the "cosmopolitan principle" they have simply been ignored. The supporters of the "cosmopolitan principle" have silently averted their eyes from the obvious fact that nations exist and they have simply imagined the existence of a world republic.

At the same time they have also been forced to ignore wars and the consequences of wars or at any rate they have had to postulate the absence of such disagreeable events. They regard tariffs as the result of a mistaken fiscal policy whereas they are really brought about by the division of mankind into independent sovereign states. Supporters of the cosmopolitan doctrine are treading a path that ignores reality and they pretend that what in fact exists is not there at all. Consequently all their conclusions are absolutely worthless in practice. On the other hand practical men have to accept the fact that national rivalries and international conflicts do exist and they have to cope with the consequences of this state of affairs. (List, 1837a, p.180)

In relation to generalisations and materialism, List himself sometimes exaggerates. He also blames Smith when in reality it was Smith's ardent students who were more to blame. But to make a point, and indeed to popularise and entertain, by telling a good story as List intended, one cannot allow oneself the luxury of being too detailed and nuanced. On the other hand, List very often quotes Smith, and sometimes duly praises his former hero.

A key to understanding List's criticism of Smith and his followers is to observe how he criticized the strategy of Smith as being too generalizing and abstract, disregarding the empirical and historical facts and particulars of each practical phenomenon (Cf. List, 1841a, pp. 171, 224ff, and 316).

Contrary to the common opinion among adherents of Smith, Smith is therefore one originator of the so-called Ricardian vice of oversimplification, as Schumpeter notes (Schumpeter, 1912, pp. 70 and 81; and Schumpeter, 1954, pp. 472-473).

It may be argued that Smith as opposed to Ricardo was a man of the practical world, since *The Wealth of Nations* is littered with real world descriptions (Smith, 1776). The deeper fact may be that he was a Rationalist arguing from a priori assumptions, and not the empirically inclined scientist, or perhaps he was both, but at different times? Mark Blaug, offers the following interesting observation that Smith,

... in fact employed radically different modes of reasoning in different parts of his works. Books I and II of *The Wealth of Nations* make liberal use of the method of comparative statics later associated with the work of Ricardo, whereas Books III, IV, and V of *The Wealth of Nations*, am most of *The Theory of Moral Sentiments*, exemplify the very different methods of the so-called Scottish historical school. (Blaug, 1980, p. 56)

Compared to Ricardo's formalised and Euclidian puppet theatre, Schumpeter argues that Smith's analysis looks less abstract due to the amount of facts included, but in reality Smith's "reasoning is not less abstract than ... Ricardo's",

This is so important as to justify repetition: Smith's work *looks* less "abstract" because it includes so much factual information that the *specialized* later works on economic theory did not include - but left for other specialized works to provide. But where he does not move within the orbit of economic theory, his reasoning is not less abstract than say, Ricardo's. With the latter, "abstractness" shows more because he confines himself to topics of an "abstract" nature, and does not provide illustrative foliage, but that is all. (Schumpeter, 1954, p. 538n)

The Rationalist Smith provided Ricardo with the spur for his more extreme abstractions. Schumpeter puts it this way,

Ricardo grapples with the basic theoretical problem and appears to us for this reason particularly 'abstract'. Smith quietly seizes on masses of facts of

the most varied character and in consequence appears to many as 'inductive'. (Schumpeter, 1912, p. 81)

List often points to issues where Smith clearly showed sensible insights, but then 'failed' to draw the right conclusions. Sometimes List expresses wonder why Smith is so one-eyed and focuses on matter and money, since he clearly is aware of the role of immaterial production factors like morality, intelligence and skill.

List concludes that Smith is caught up in his quest for fame, and therefore his preconceived opinions rules out inconvenient facts,

According to List, Smith established an axiom (universal freedom of trade) (Cf. List, 1841a, pp. 347-348), which would fit a 'scientific' and axiomatic-deductive method in the economic area. List writes,

Adam Smith set out from this fundamental idea, and to prove it and to illustrate it was the sole object of all his later works. He was confirmed in this idea by Quesnay, Turgot, and the other coryphaei of the physiocratic school, whose acquaintance he had made in a visit to France in the year 1765.

Smith evidently considered the idea of freedom of trade as an intellectual discovery which would constitute the foundation of his literary fame. How natural, therefore, it was that he should endeavour in his work to put aside and to refute everything that stood in the way of that idea; that he should consider himself as the professed advocate of absolute freedom of trade, and that he thought and wrote in that spirit.

How could it be expected, that with such preconceived opinions, Smith should judge of men and of things, of history and statistics, of political measures and of their authors, in any other light than as they confirmed or contradicted his fundamental principle? (List, 1841a, p. 348)<sup>128</sup>

This 'discovery' was supposed to establish him as the Newton of economics. In parallel to Newton's first axiom on gravity (Cf. Newton, 1687), Smith tried to create a mechanical model of the world of economics similar to what Newton had created for astronomy.

According to Blaug, however, Smith based his system upon self-interest as the basic axiom of economics (Cf. Smith, 1776), just as Smith had given (irrational) human sympathy an axiomatic role in the ethics of his *Theory of Moral Sentiments* (Cf. Smith, 1759; and Blaug, 1980, p. 57).<sup>129</sup>

Smith may also have used his empirical examples in books 3, 4, and 5, only as illustrations of the theory in books 1 and 2, as List suggested. REF?

---

<sup>128</sup> See also the subsection above, *Promoting Free Trade*.

<sup>129</sup> See also the section *The rational and analytical method*, in chapter 2; and the section *Natural Rights and 'the selfish system'*, in chapter 5.

### 3.14 The paradox of generalisations – appropriate question

List's methodological criticism against Adam Smith concerned the many generalisations that Smith made, which especially enabled him to play down the role of state regulation.

As we know, paradoxically, any generalisation is per definition a lie, and a refutation of empirical facts. Any assertion is a distortion of the real world and therefore a lie to the extent that it uses generalisations. - And since any human concept and symbol and indeed the any human language itself, and indeed the core of science itself consist of generalisations, or universals, so even List cannot avoid making generalisations.

The key is therefore to generalise at an appropriate and adequate level. But since there is no-one to say a-priori what the right level of generalisation is, the key seems to be to generalise according to the question one intends to answer.

On this background, it is only fair to ask whether Smith and List asked and were trying to answer different questions. And indeed they were, since Smith and List were trying to solve the problems of two different countries separated not only by some 50-60 years, and in addition separated by different situations. Britain was even in 1776 an economic leader, whereas Germany was a follower. Furthermore, in Smith's time the economic peculiarities of industry in general may have been less obvious than they were in List's time, when List was observing not only Germany's situation but also the history of Britain. Furthermore, England was indeed a rare case institutionally as e.g. Polanyi points out regarding the lacking labour market (Polanyi, 1944, p. 84), and the lacking market in land as List points out (Cf. List, 1827b, p. 135).

### 3.15 Real estate - the forgotten market

One example of ill-suited generalisations may be the different circumstances of- and the different treatment of real estate markets. List spent a lot of energy in describing the real estate market in his *Outlines* (Cf. List, 1827b) and his Harrisburg address (Cf. List, 1828c). Later, in 1841, he stated that most of the material value of a nation was tied up in real estate,

... we shall find that the greatest part of the wealth of the nation shows itself in the thus increased value of landed property. (List, 1841a, p. 238)

In every nation the value of landed property, of dwelling houses in rural districts and in towns, of workshops, manufactories, waterworks, mines, &c. amounts to from *two-thirds to nine-tenths of the entire property of the nation*. (List, 1841a, p. 230)

In the *National System*, List argues that the market value of real estate is capitalised rent or "discounted rental income", which depended

on mental and material capital, but he thereby neglects the expected price-gain from asset-price inflation.<sup>130</sup>

The selling value of landed property is nothing else than capitalised rent; it is dependent, on the one hand, on the amount and the value of the rent, but, on the other hand, and chiefly, on the quantities of mental and material capital existing in the nation. (List, 1841a, p. 235)

List ends the 10<sup>th</sup> letter of the *Outline...* by criticising the Cosmopolitan school for not discussing the real estate market, which constitutes the greater part of the national wealth. Moreover, according to List, the reason for this oblivion was that the English real estate market was practically non-existent. The Cosmopolitan School therefore limited its analysis to rents and excluded any discussion of property prices (and Say uncritically follows Smith, although under very different French circumstances),

The founders of the cosmopolitical system forgot entirely to say anything about the causes of the rise and fall of land prices, and about the consequences of it. This is the more astonishing, as the prosperity of the greater part of a nation depends upon the steadiness of the prices of land and property (which forms the greater part of the riches of a nation). The cause of this omission is, however, obvious. In those countries in which Mr. Smith composed his system, the greater part of land property, forming life estates, is not in free commerce, and therefore he only perceived alterations in rents<sup>131</sup> and not in land prices, Mr. Say, who lives in a country in which nearly all real estates are in free commerce, overlooks the omission by blindly following his master, as he always does, except in some matters of little consequence. (List, 1827b, p. 135)

We here see a parallel to Karl Polanyi's criticism of Malthus and Ricardo (and the English classical school), which according to Polanyi generalised from a peculiar English situation with a non-existent labour market,

It follows that neither Ricardo nor Malthus understood the working of the capitalist system. (Polanyi, 1944, p. 123)

If we acknowledge the criticism of both List and Polanyi, we have a situation where the English Classical School after Malthus and Ricardo,

---

<sup>130</sup> Michael Hudson reminded me about this point. List must have been thinking of a sounder capitalist market, where assets are valued for their productive value - as opposed to a financial capitalism where assets are valued for their speculative value. The real world is a mixture of both these idealised types, however.

<sup>131</sup> (1) Mr. Smith . . . rents. But see the passage Book II. chap, iv., on "The Ordinary Market Price of Land." Say also in his "Principles," Book II. chap, ix., discusses the price of land in relation to rent and profit. (List's note)

generalises about capitalism from circumstances where markets for labour and real estate are absent.

In addition, capital mobility across national borders was to a large extent ignored by the Classical School, although not by Smith, due mainly to risk and legal obstacles. In the days of Adam Smith, capital mobility was in practice limited to transfers between the mother country and her colonies. The successors of Adam Smith did not have this excuse for their ignorance.

As the central Trotskyite theoretician Ernest Mandel indicates, the Classical School thereby left out a core ingredient of the capitalist mode of production, since mobility of capital is (or rather became) the motive force of capitalism,

In simple commodity production, ... The mobility of labour is the only dynamic factor in the economy. As Engels pointed out in his Addendum to Capital Vol. III (Marx, g, pp, 1034-7), in such an economy, commodities would be exchanged at prices which would be immediately proportional to values, to the labour inputs they embody.

But under the capitalist mode of production, this is no longer the case. Economic decision-taking is not in the hands of the direct producers. It is in the hands of the capitalist entrepreneurs in the wider sense of the word (bankers - distributors of credit - playing a key role in that decision-taking, besides entrepreneurs in the productive sector properly speaking). Investment decisions, i.e. decisions for creating, expanding, reducing or closing enterprises, determine economic life. It is the mobility of capital and not the mobility of labour which becomes the motive force of the economy. Mobility of labour becomes essentially an epiphenomenon of the mobility of capital. (Mandel, 1990, ch. 4)

All in all, the version of capitalist market economics left standing by the Classical School is amputated indeed, dealing with a very different kind of market economics than what later emerged. Thus Polanyi's verdict stands firm (Polanyi, 1944, p. 123) and so do List's words that,

... political economy must ... adapt its measures to the ... particular circumstances of each nation. (List, 1841, *Introduction*, in Hirst, 1909, pp. 290-291)<sup>132</sup>

### 3.16 Epistemology and the English Classical School

List claims that the Cosmopolitan System epistemologically is based on Rationalism, starting with a priori assumptions about the real world. These assumptions or axioms are materialistic,<sup>133</sup> that production is caused by (manual) labour and the value of material things. Therefore

---

<sup>132</sup> Cf. a more extensive quotation above in the section *Differentiate future from present*.

<sup>133</sup> See also the section *Natural Rights and 'the selfish system'*, in chapter 5.



the system applies only to already produced material goods, and not the ability to produce them, the productive force,<sup>134</sup>

Moreover the "cosmopolitan system" is a purely materialistic conception which fails to take account of the human spirit - and the human power - that lie behind material things. At best the "cosmopolitan system" lays far greater stress upon material objects than upon the creative power which makes possible the production of material goods. The supporters of the "cosmopolitan system" make this mistake - just as they made the fundamental mistake which we have already mentioned - because they lay down a priori doctrines and then try to prove them.<sup>135</sup> They consider it axiomatic that all production depends upon labour and upon the value of material things. But as soon as they attempt to develop and to elucidate these principles in conformity with what happens in the real world it becomes crystal clear that their doctrines can be applied only to material goods that have already been produced and cannot be applied to productive powers which obey entirely different laws.

This has led the supporters of the "cosmopolitan system" to reach certain erroneous conclusions. (List, 1837a, pp. 180-181)

As noted,<sup>136</sup> Smith is therefore one originator of the so-called Ricardian vice of oversimplification.

Subsuming matter under money opened up for the formalisation and abstraction that became the trademark of the Ricardian tradition, and the Ricardian vice that later was continued and overdone through the useful but often misused tool of econometrics.

The vice of being too general, may have its origin in the specific English Mercantilist tradition which to a very large extent focused on money and currency, whereas the parallel German Mercantilism focused on more practical matters such as forestry, mining, and transport. Such practical issues are close to non-existing in the English literature. Matters of taxation and revenue they have in common.

The merit of focusing on money is that many issues in economics can be subsumed under a common denominator, or in other words, we have a common denominator for many phenomena in money. The drawback is that the generalisation is not suited for all purposes and issues, since the tool will only answer some questions and not all. For instance, a long

---

<sup>134</sup> We may comment that a rationalist position might as well have started with assumptions that are not materialistic, and instead idealistic. What List probably wanted to express is his conviction that an empirical approach would instead have led to an idealist point of view, as could be argued has been the case with modern conceptions of knowledge economy, information economy and the like.

<sup>135</sup> 1. Droz (*Econ. polit.*, introduction vi) vigorously criticises those who do not take the trouble to distinguish between what is known and what is not known - and this is the only way to arrive at the truth. [The full reference is Joseph Droz, *Economie politique ou principes de la science des riches* (Paris, 1829)]. [List's note, with an additional comment by Henderson, not reproduced here]

<sup>136</sup> In the section above; *Generalisation and abstraction*.

term perspective on the creation of productive competence is a matter that involves many issues that are hard to treat with a 'monetary' analysis.

### **3.17 Towards 'monetarism': The theory of 'values of exchange'**

List claims that since Adam Smith fails to come to terms with the deeper mental causes of national wealth, his theory is nothing but a theory of value of what already is produced, a 'theory of exchange values', (in other words a theory of prices of goods, labour, capital etc.). Smith's ignorance of the mental powers misled him into making economics into a study of money instead of being a science of the productive powers,

... If he had followed up the idea 'productive power' without allowing his mind to be dominated by the idea of 'value,' 'exchangeable value,' he would have been led to perceive that an independent theory of the 'productive power,' must be considered by the side of a 'theory of values' in order to explain the economical phenomena. But he thus fell into the mistake of explaining mental forces from material circumstances and conditions, and thereby laid the foundation for all the absurdities and contradictions from which his school (as we propose to prove) suffers up to the present day, and to which alone it must be attributed that the doctrines of political economy are those which are the least accessible to the most intelligent minds. That Smith's school teaches nothing else than the theory of values, is not only seen from the fact that it bases its doctrine everywhere on the conception of 'value of exchange,' but also from the definition which it gives of its doctrine. It is (says J. B. Say) that science which teaches how riches, or exchangeable values, are produced, distributed, and consumed. This is undoubtedly not the science which teaches how the productive powers are awakened and developed, and how they become depressed and destroyed. M'Culloch calls it explicitly 'the science of values,' and recent English writers 'the science of exchange.' (List, 1841a, pp. 137-138)

Jean-Baptiste Say, who List also attacks, was closer to List in both time and space, as he was writing in France only a few decades before List. Nevertheless, and similar to his criticism of Smith, List also here points out that due to his materialistic basis, Say is doomed 'forget' the power of the (immaterial) productive forces and to focus only on (material) exchange value,

Our critics cannot accuse us of failing to appreciate the significance of Adam Smith's book although we have rejected his view that labour is the origin of wealth. J.B. Say has shown that Adam Smith's definition of "labour" is much too narrow. We believe that we have shown that the conception of "industrious classes" that Say puts in place of Adam Smith's "labour" is also a very narrow definition which interprets productive powers in far too materialistic a fashion. (List, 1837a, p. 190)

List claims that since Say is purely concerned with wealth as money (exchange value), Say thereby suggests that producers of cultural values do not contribute to the wealth of the nation,

Since his doctrine is entirely materialistic in conception he is concerned only with the "exchange value" of material goods - he tries to justify his view by defining the activities of these producers in purely materialistic terms. Say argues that these producers create only "immaterial values" which are consumed as soon as they are made. If this were really the case the producers in question would be engaged in a truly empty sort of production which would hardly be worth discussing at all. Say also argues that the producers of "cultural values" receive "exchange values" for their services. This argument, too, falls to the ground since it implies that the producers of "cultural values" make no contribution to the wealth of the nation.

The foundation of Say's doctrine is the conception of material wealth. His whole system is based upon it. Consequently he concentrates his attention upon the theory of value and he is interested in productive forces only insofar as they can be brought into direct association with his doctrine. (List, 1837a, pp. 37-38)

Edwin Cannan writes in his *Editor's Introduction* to the 1904 edition of *The Wealth of Nations*, that Smith considered industry as non-productive and the only productive activities were those that directly produced vendible objects,

As to unproductive labour, he was not prepared to condemn the whole of Glasgow industry as sterile, but was ready to place the mediæval retainer and even the modern menial servant in the unproductive class. He would even go a little farther and put along with them all whose labour did not produce particular vendible objects, or who were not employed for the money-gain of their employers. (Cannan, 1904, p. 1.51)

### **3.18 Ricardo's monetary abstraction<sup>137</sup>**

Ricardo has often been considered the economist of distribution and not of growth. This is partly a misunderstanding since Ricardo saw proper distribution as a precondition for the growth of an economy focusing on the propensity to accumulate of the various production factors, following Smith's materialistic focus on accumulation. Therefore, Ricardo's focus is not on distribution as a channel to consumption, but as a channel to accumulation and growth.

Mark Blaug offers a description of Ricardo that almost presents his theories as abstractions devoid of realism,

---

<sup>137</sup> See also the section *Measurement and egotism*, in chapter 2, and b) 'the selfish system' of irrational man, in chapter 5.

In Ricardo, the historical, the institutional, and the factual, which had figured so prominently in the writings of Adam Smith, faded into the background, ... (Blaug, 1980, p. 58)

Unlike Malthus, David Ricardo elaborated the reductionist and analytic method of Smith (Cf. Blaug, 1980, p. 57) into an abstract method. Nevertheless, he accepted Malthus' assumption of decreasing returns and made it the core piece of his pessimistic system, which became a centre piece of British Classical School and for Marginalism.<sup>138</sup> List writes that the School has made itself irrelevant and akin to astrology than to science,

At present the Theory of Exchangeable Values has so completely lost its influence, that it is almost exclusively occupied with inquiries into the nature of Rent, and that Ricardo in his 'Principles of Political Economy' could write, 'The chief object of political economy is to determine the laws by which the produce of the soil ought to be shared between the landowner, the farmer, and the labourer.'

While some persons are firmly convinced that this science is complete, and that nothing essential can further be added to it, those, on the other hand, who read these writings with philosophical or practical insight, maintain, that as yet there is no political economy at all, that that science has yet to be constructed; that until it is so, what goes by its name is merely an astrology, but that it is both possible and desirable out of it to produce an astronomy. (List, 1841a, p. 361)<sup>139</sup>

The different evaluations of Ricardo by List and by Schumpeter illuminate what value they placed on abstraction in the monetary dimension, as a scientific method. More fundamentally, their different evaluations illuminate which problems and questions they focused on.

List describes the practice of focusing on exchangeable values, money, as a shopkeeper's theory of economics that had nothing to do with national economics. Schumpeter agrees with List's opinion of Adam Smith as primarily preoccupied with 'exchange value',

---

<sup>138</sup> "In Ricardo the marginal analysis exists only in a rudimentary form." (Schumpeter, 1912, p. 73n1) Malthus and Ricardo's assumption concerning agriculture led to the invention of Marginalism. Often the assumption of given and stable production factor relations is also present, assuming a lack of inventiveness.

<sup>139</sup> Again List fails to quote correctly, but this may be due to the translation into German and then back into English, and also due to differences in the handful editions of Smith's *WoN*. In any case the meaning is correct. Ricardo writes, "But in different stages of society, the proportions of the whole produce of the earth which will be allotted to each of these classes, under the names of rent, profit, and wages, will be essentially different; depending mainly on the actual fertility of the soil, on the accumulation of capital and population, and on the skill, ingenuity, and instruments employed in agriculture."

To determine the laws which regulate this distribution, is the principal problem in Political Economy: ..." (Ricardo, 1817, *Preface*)

It is above all necessary to bear in mind clearly that most— and all the leading—classical economists had a much narrower aim in view than some of the earlier and many of the later thinkers. Already Adam Smith did not intend to compose a social universal science out of economic material; even the *Wealth of Nations* defines its subject-matter as a specialized branch of science to be distinguished from the general framework of economic life. (Schumpeter, 1912, p. 80)

Schumpeter likewise describes Ricardo's method as an abstraction and reduction of economics into an analysis of values in exchange,

Ricardo set himself even narrower limits; fundamentally he merely intended to clarify the conception of what in modern German economic theory is sometimes called the economy of exchange (*Verkehrswirtschaft*) and to elucidate general forms of the economic process within this economy of exchange. (Schumpeter, 1912, p. 80)

Nevertheless, as opposed to List, Schumpeter admires Ricardo's abstraction and reduction of economics into an analysis of values in exchange and concludes regarding Ricardo's method that this 'monetarism' is the right way to go for the economic science,

In theoretical problems, however, it is possible to be less precise and profound than was Ricardo, but in essence it is impossible to proceed in a way that is different from his. (Schumpeter, 1912, p. 81)

Unfortunately, once again,<sup>140</sup> Schumpeter offers us no explanation and reasons for his opinion here, but it is obvious that he favoured a formal approach to economics.

### **3.19 Exchange value versus productive powers**

List's criticism of Adam Smith can be summarised, as a tendency of Smith's to generalise overly, thereby laying the foundation for modern abstraction in economics, the Ricardian Vice, and the "monetisation" of economic theory (using money as the common denominator of all factors).

The deeper reason for these generalisations and also for Smith's mistakes of seeing results as causes, are rooted, according to List, in Smith's materialism, which ignores the immaterial factors that constitute the core of the productive powers, the catalyst so to speak. Capital, and thereafter money, was conceived materialistically as 'stock'.

This has since been typical within this tradition, instead of focusing, as the idealist tradition, on the productive power of a nation, in particu-

---

<sup>140</sup> Another example of Schumpeter's missing argument, is his distaste for underconsumption theories (Cf. Schumpeter, 1954. pp. 740-750; and pp. 1129-1135)

lar, on the immaterial forces that primarily shape this power: creativity and morality.

In an often quoted passage, List points to the importance of immaterial products. He ridicules the school of Adam Smith, claiming that their theories concerned only with value of exchange imply that a donkey is more productive than a scientist such as Kepler,

The man who breed pigs is, according to this school, a productive member of the community, but he who educates men is a mere non-productive.

...

A Newton, a Watt, or a Kepler is not so productive as a donkey, a horse or a drought-ox ... (List, 1841a, p. 142)

After listing numerous “immaterial” professions that promote the productive power of the future, such as teachers, lawyers, physicians, administrators, artists and priests, List continues,

In the doctrine of mere values, these producers of the productive powers can of course only be taken into consideration so far as their services are rewarded by values of exchange. ...

But whenever our consideration is given to the nation (as a whole and in its international relations) it is utterly insufficient

... The prosperity of a nation is not, as Say believes, greater in the proportion in which it has amassed more wealth (i.e. values of exchange), but in the proportion in which it has more developed its powers of production. (List, 1841a, p. 144)

Wilhelm Roscher likewise claims in this regard that value in exchange only has an interest from the point of view of the private businessman and little interest from the national point of view. Roscher writes in great detail that,

If, now, we were to estimate the resources of an entire people, or even of the world, by summing up the value in exchange of their several component parts, many very important elements would be left out of the account entirely; as for instance, harbors, navigable streams, numberless relations which have, indeed, no value in exchange whatever, but which are of the highest importance, because promotive of the economy of the nation. (Roscher, 1877, § 8 ff)

The (materialist) classical school and the (materialist) Marx focused on physical labour and -capital and largely missed the point made by the idealist school about the importance of the mental capital of individuals, institutions, and society.

The focus on measurability inherited from the nominalist point of view, led these economists of the British Classical School to focus on money, since this was easily measurable.

Roscher points to the Italian-English traditions’ preoccupation with monetary phenomena such as prices – as opposed the French-German preoccupation with law, taxation, science and ‘physical economy’, such

as forestry, canals, irrigation and crafts. Roscher furthermore claims that the Italian-British liberalist tradition of economics originated with the merchants whereas the Continental (Europe and US) tradition originated with the Treasury:

Political Economy in Germany developed out of the science of law and the cameralistic sciences, while in England and Italy it had its origin chiefly in the study of questions of finance and foreign commerce. (Roscher, 1877, §19)

Roscher's claim may be true generally speaking, but there are several (early) Italian and (early) English economists that fit the French-German statecraft traditions of Colbertism and Cameralism, such as Thomas Gresham (1519-1579) in England, and later Antonio Serra (1568-1620) in Italy.

### **3.20 Smith's inability to differentiate: Generalisations**

A key to understand List's criticism of A. Smith and his followers is that he criticised the strategy of A. Smith as being too generalising, disregarding the empirical and historical particulars of each practical phenomenon (Cf. List, 1841a, pp. 171, 224ff. and 316).

Generalisation reflects unwillingness or an inability to differentiate, and with Smith, this can be observed on a number of issues, which will be dealt with below. In most instances, the reason for Smith's generalisations is his materialism, which prevents him from considering immaterial- and dynamic factors.

### **3.21 Differentiate global- from national economics**

List claims that because Smith and Say ignore the institution of the nation, and they are unable of differentiating cosmopolitan economics from national economics, and therefore they are unable to see or and acknowledge the role that power plays in the international world,

The idea of independence and power originates in the very idea of 'the nation.' The school never takes this into consideration, because it does not make the economy of the separate nation, but the economy of society generally, i.e. of the whole human race, the object of its investigations. If we imagine, for instance, that all nations were united by means of a universal confederation, their individual independence and power would cease to be an object of regard. The security for the independence of every nation would in such a case rest on the legal provisions of the universal society, just as e.g. the security of the independence of the states of Rhode Island and Delaware lies in the union of all the free states constituting the American Union. Since the first foundation of that Union it has never yet occurred to any of these smaller states to care for the enlargement of its own political power, or to consider its independence less secured than is that of the largest states of the Union. (List, 1841a, p. 181)

### **3.22 Differentiate exchange value from productive powers**

List claims that since Smith and Say are unable of differentiating the theory of exchange value from the theory of productive powers, they use - and confuse - arguments from one theory into the other,

... Say clearly included the theory of value in his definition of "political economy" which, in his view, was that branch of knowledge which examines the production, division, and consumption of wealth. But this definition shows that Say does not propose to discuss how productive power is established, how they develop, or how they can be destroyed.

We do not deny that Adam Smith and J.B. Say recognise the significance of productive power for the creation of material wealth. But we hope to show that they have failed to recognise the difference not only between the two doctrines which we have mentioned but also between the theories of cosmopolitan and national economics. These writers confuse the two theories, and when they seek to support the policy of free trade they are quite capable of using propositions derived from one doctrine as arguments against the other doctrine. (List, 1837a, p. 37)

### **3.23 Differentiate cause from effect: Mental powers**

Regarding Smith's theory of the division of labour, List criticises Smith for being a superficial materialist, and that Smith confuses cause and result. Skill and judgement is the true cause of wealth, not division of labour per Ce.<sup>141</sup>

List evaluates at length Smith's conception of the causes of wealth. List argues that Smith was too preoccupied with the mechanical division of labour, as a source of wealth, as to understand the powers of production and the underlying immaterial causes for wealth. List writes,

It is evident that Smith was too exclusively possessed by the cosmopolitical idea of the physiocrats, 'universal freedom of trade,' and by his own great discovery, 'the division of labour,' to follow up the idea of the importance to a nation of its powers of production. ...

However, we on our part believe ourselves able to prove that just this zeal to put the important discovery 'division of labour' in an advantageous light, has hindered Adam Smith from following up the idea 'productive power' (which has been expressed by him in the introduction, and also frequently afterwards, although merely incidentally) and from exhibiting his doctrines in a much more perfect form. By the great value which he attached to his

---

<sup>141</sup> One may argue that List's criticism is unfair, since Smith does mention skill etc. as important, but on the other hand what is at issue here is the main tendency of Smith, not individual instances where he may have diverted from his main path.



idea 'division of labour' he has evidently been misled into representing labour itself as the 'fund' of all the wealth of nations, although he himself clearly perceives and also states that the productiveness of labour principally depends on the degree of skill and judgment with which the labour is performed. We ask, can it be deemed scientific reasoning if we assign as the cause of a phenomenon that which in itself is the result of a number of deeper lying causes? (List, 1841a, ch. 12: *The Theory of the Powers of Production and the Theory of Values*, pp. 134-136)

List answers by claiming that the human spirit; the social order; the powers of nature; are the sources of wealth,

What else can it be than the spirit which animates the individuals, the social order which renders their energy fruitful, and the powers of nature which they are in a position to make use of? (List, 1841a, p. 137)

List asks, "If work produces wealth, what produces work?", and answers, "some inner urge",

It is meaningless to claim that the work people do is the origin and cause of wealth. Is there no difference between the work performed on a steamship by the boy who handles the rudder and by the engineer? ... Again there is a difference between the output the output of demoralised superstitious slaves and of free, enlightened, cultured, and intelligent workers.

To obtain a clear and accurate picture of productive powers - and of the means by which those powers can be developed and protected - it is necessary to ask the question: If work produces wealth, what produces work? ... We always find that there is some inner urge which sets the human body in motion. ... (List, 1837a, p. 184)<sup>142</sup>

Nevertheless the individual human spirit is a product of human collective circumstances; cultural- and social-,

... However, most depends in all these respects on the conditions of the society in which the individual has been brought up, and turns upon this, whether science and arts flourish, and public institutions and laws tend to promote religious character, morality and intelligence, security for person and for property, freedom and justice; whether in the nation all the factors of material prosperity, agriculture, manufactures, and trade, have been equally and harmoniously cultivated; whether the power of the nation is strong enough to secure to its individual citizens progress in wealth and education from generation to generation, and to enable them not merely to utilise the natural powers of their own country to their fullest extent, but also, by foreign trade and the possession of colonies, to render the natural powers of foreign countries serviceable to their own. (List, 1841a, p. 137)

---

<sup>142</sup> A snippet of this quotation has been used in the section, *Immaterial forces as basis for entrepreneurship*, in chapter 4.

### **3.24 Differentiate cause from effect: Civilisation**

List claims that the Orthodox School errs in believing that the cause of progress in civilisation is trade. List instead rather finds that it is industry that is to be thanked, both for progress in civilisation and in trade,

The popular school has attributed this civilising power to foreign trade, but in that it has confounded the mere exchanger with the originator. Foreign manufactures furnish the goods for the foreign trade, which the latter conveys to us, and which occasion consumption of products and raw materials which we give in exchange for the goods in lieu of money payments. (List, 1841a, p. 142)

List attributes this confusion of cause with effect to the materialism of the Orthodox School,

We now see into what extraordinary mistakes and contradictions the popular school has fallen in making material wealth or value of exchange the sole object of its investigations, and by regarding mere bodily labour as the sole productive power. (List, 1841a, p. 142)

### **3.25 Differentiate cause from effect: Nation**

List claims that the Orthodox School thinks that civilisation and prosperity emerges from the solitary individual and therefore seeks to exclude the power of the state. List sarcastically comments that if, according to the School, individuals are more productive without interference from the State then savage nations must be the most productive. He might have added that if this were correct there would have been little reason for individuals to unite in companies,

Everywhere it seeks to exclude the action of the power of the State; everywhere, according to it, will the individual be so much better able to produce, the less the power of the State concerns itself for him. In fact, according to this doctrine savage nations ought to be the most productive and wealthy of the earth, for nowhere is the individual left more to himself than in the savage state, nowhere is the action of the power of the State less perceptible. (List, 1841a, p. 171)

List's view was the opposite, that a strong civilised state gives an immense boost to the potential liberty of the individual person, the national culture enables him to express himself in numerous ways, increases his productivity and his welfare,

Union of individual faculties in pursuit of a common end is the most effective means of obtaining individual happiness. Alone and apart from his fellows the individual is weak and helpless. The greater the number of those to whom he is socially united and the more complete the union, the greater

and more complete is the resulting moral and physical welfare of the individual members.

The highest union of individuals realized up to the present under the rule of law is in the State and the nation. The highest imaginable is the union of all mankind. (List, 1841b, *Introduction*, in Hirst, 1909, p. 301)

### **3.26 Differentiate cause from effect: History**

In essence, List claims that Smith disregards history because he disregards mental powers and thereby learning.

List argues that regarding the contemporary wealth of Britain, Smith and his followers confuse causes and effects, by ignoring history. They mistook the reasons for the supremacy of Britain, by regarding the contemporary free trade policy of Britain (if this was descriptive) as the cause of prosperity (Cf. List, 1841a, p. 126).

List argues that the cause rather was the history of regulation of the past four centuries since Edward III. More specifically, he argues that the present policy of free trade was a result of the success of the former policy of ordered regulation of economic and social affairs. Among these instruments Britain utilised protection of manufactures, since Britain formerly was subordinate to other nations (the Hanse and then Holland), but since she now had gained supremacy she could utilise, or at least claim to utilise, free trade. List claims that the radical free traders would have been right if the world had been a perfect political union,

If, as the prevailing school [of political-economic thought] requires, we assume a universal union or confederation of nations as the guarantee for an everlasting peace, the principle of international free trade seems to be perfectly justified, ... (List, 1841a, p. 123)

List criticises the claim by radical free traders that a political union will result from free trade, however, this prevailing thought is contrary to the prevalent political situation. The free trader,

... assumes the existence of a universal union and a state of perpetual peace, and deduces therefrom the great benefits of free trade. In this manner it confounds effects with causes. (List, 1841a, p. 126)

This prevailing thought is also contrary to historical experience where political union precedes commercial union. List explains that,

Among the provinces and states which are already politically united, there exists a state of perpetual peace; from this political union originates their commercial union. All examples which history can show are those in which the political union has led the way, and the commercial union has followed. Not a single instance can be adduced in which the latter has taken the lead, and the former has grown up from it. (List, 1841a, p. 126)

Ironically, the effect of List's efforts was to make the counter-historical come true, as Sampson S. Lloyd, the translator of the *National Systems* in 1885, comments in a footnote,

This statement was probably accurate up to the period when List wrote, but a notable exception to it may now be adduced. The commercial union of the various German states under the Zollverein preceded by many years their political union under the Empire, and powerfully promoted it. -- TR. (Lloyd, 1885, in List, 1841a, p. 126)

Lloyd forgets that the Zollverein was no fully fledged economic union. Although, the same "exception" later happened in South Africa and Europe, the cross-border rivalries in S.A. did not stop until after a forced political union came about in 1902-1910 (after the Anglo-Boer war of conquest),

The first considerable factor in determining the financial position of the four colonies had been the customs union, which was concluded almost immediately after the close of the war. (Goodfellow, 1931, p.197)

Even the protectionist economic policy of *Imperial Preference* was forced,

... in 1903 Mr. Chamberlain, through Lord Milner, forced South Africa to start a fresh experiment in Preference against the wish of the Government of Cape Colony, ... (Evans, 1912, p. 97)

Furthermore, the present troubles in the monetary union of the EU may yet prove List right ...

### **3.27 Smith's short-sightedness 1-4**

List's criticism was generally directed against the inclination to short-term evaluations and the related narrow-mindedness in economic affairs. His criticism had four specific targets:

- 1) Landed interests (particularly England)
- 2) Merchant interests (particularly Holland and Britain)
- 3) Public regulation (in general, both the lack of it, and its excesses)
- 4) International politics (particularly England, being the most powerful and influential nation at the time, as with the US today.)

List criticises England and her moral misuse of her powers since she was the most powerful and influential nation at that time. He mentions the Hanse, Venice and Holland as similar historical examples of misuse of dominating power and the United States as a likely future example of such misuse.

In all these cases, List pointed out the international aspect of the problems. In addition, in all these cases, he insisted in a Socratic manner that the actors who were his targets did not have a sufficient understanding of their own interests, nor of how they would benefit from contributing to the interests of other actors. They therefore acted contrary to their own interests.

His suggestion for remedying this was in part through legal and regulatory arrangements as well as education and moral enlightenment. He focused on the gains to welfare to be earned by everyone from a more long-term and wider-minded approach, so to say within a positive sum game. This constitutes Man's unified effort to gain power over nature.

On the other hand, he criticised a policy devoted to Man's power over Man. This kind of power struggle is by definition a zero-sum game, where one Man's gain is the other's loss. In the long run, this will be destructive.

List recalled the Italians who termed these two traditions respectively the *manufacturing system*<sup>143</sup> and the *mercantile system*, and favoured the former (Cf. List, 1837a, p. 178). Most likely, he saw A. Smith's position as a continuation of the latter. In addition, historians have argued that liberalism is a child of a power-oriented and beggar thy neighbour type of mercantilism as opposed to a 'prosper thy neighbour' type of mercantilism - of the leading nation. In all cases, his suggestions for remedies of these long-term, market inefficiencies were of a legal nature.

- 1) Concerning the (English) landed aristocracy, protection should be lifted and implementation of manufactured inventions promoted. This would raise industrial production, demand for agricultural products, and landed rent. Instead, the English landed aristocracy;

... killed the hen that had laid the golden eggs. (List, 1841a, p. 370)

- 2) Concerning the (Dutch) merchants, economic integration should be encouraged through law-enforced investments in communications and through trade agreements, where the Dutch were to buy more from Germany and less from England in order to benefit their local industrial base for trade. Internal trade barriers were to be lifted and limited and differentiated external ones created.
- 3) Concerning governmental regulation and lacking investments into infrastructure, he suggested establishment of schools, scientific academies and journals, telegraphs, harbours, railroads etc. through public regulation and administration. For industry he advocated instruments like differentiated cheap credit, differentiated tariff protection, monopolies limited in time, differentiated subsidies, grants, patent-laws, prizes, and exhibitions, and in particular

---

<sup>143</sup> Elsewhere List calls his preferred tradition *The Industrial System*.

taxation arrangements which he claimed to be of far higher significance than any other intervention into industrial matters.

- 4) Concerning international politics and the role of England, List argues that England should not trip the other nations up as it had so far, and as the towns of the Hanse, the Italians and the Dutch before it. Instead, England should encourage the industrial development of its potential competitors since this would create markets for advanced export products and promote cultural advance in England.

In most of these cases, List intended to regulate using law (national and international) and the price mechanism as prime instruments.

The above four points, List treats in the following way:

- a) Ad 1 and 4): The landed interests - the case of Britain

It was central to his charge, that landed interests were to blame for the backwardness not only of Germany and Russia, but also for the lack of progress in Britain. Instead of protecting their high grain prices and farming interests, List said, English landowners and politicians ought to agree to liberalise grain trade (the later repeal of the Corn Laws) and import grain from Germany and Russia. These nations now instead of earning an income on grain export had to protect their industries in order to keep up the balance of trade and payments, thereby damaging English industrial export.

Liberalising English grain trade would lead to lower food prices in England, as Ricardo and Cobden argued, and promote industrialisation and urbanisation of the England. Eventually, this would eventually lead to higher food and real estate prices and therefore higher rents from the land of the landowners, which would by far outweigh the initial loss from lower grain prices. The failure of the landowners lay in their short-term approach to profit, and this damaged themselves and English society in general, as well as other nations. He warned that this failure to further the long-term harmony of interests, would instead favour a clash of interests that in the end would have disastrous effects. (Cf. List, 1841a, ch. 20: *The Manufacturing Power and the Agricultural Interest*, especially pp. 238, 240, 244, 247, 248, 250)

List may have had overly optimistic ideas concerning the will and even the possibilities of the representatives of the British landed interests to implement an enlightened policy of this kind. It is very likely that these interests would have been broke before they would have the opportunity to reap the benefits of the former preferred policy. In order to implement this kind of policy, a transferral of resources to compensate intermediary loss would have been necessary. For instance, German and British authorities might have compensated the British landowners with subsidies, financed from increased industry. This would

have been, however, a rather unlikely arrangement due to state budgetary problems, as well as due to the short-term mentality of politicians and industry, even before the dawn of democracy.

b) Ad 2 and 4): The merchant interests - the Dutch case

List charged the Dutch merchant regimes of short-sighted selfishness to the detriment not only of the German people but also to themselves. After the Dutch independence from Germany (the "Holy Roman Empire of the German Nation"), the pivot point of control over the main transportation artery was taken away from Germany, by crucial intervention of Elisabeth I of England (Palmer and Colton, 1986, p. 131). The Dutch thereafter imposed taxes on all German traffic passing through on the river Rhine, as well as that of the French and Belgian traffic on the rivers Maas and Scheldt. List used a kind of supply-side 'Reaganomics' argument".

He argues that that the Dutch should lower their taxes on German traffic and started to buy German goods instead of the less expensive and better English goods. This would over time result in so much growth in Germany that it would increase the traffic immensely and thereby lead to far higher profits for the Dutch merchants than the present arrangement. Again, time, power, and on the other hand, short-sightedness were crucial parts of his argument. And again, his suggestion for a remedy of the inefficient situation was that of a change in the administrative and legal arrangement.

List discussed how to force the Dutch into an "agreement" of mutual beneficial character (Cf. List, 1841a, p. 407), but once again did not mention the likely and severe losses the Dutch merchants would have to suffer in the intermediate period. Nor did he discuss a strategy of compensation where Germany might have paid Holland. As in the British case of the Corn Laws, this would most likely have been a complicated and perhaps impossible strategy, involving state budgetary balances etc. List could, as both a German and a humanist, however, not refrain from pointing out the matter of long-term interests.

List's description of the relation between the Netherlands and Germany touches upon his ideas of the prerequisites of a sovereign and therefore viable nation, reminding us also of the present situation of many smaller states within the EU.

c) Ad 3 and 4): Public regulation of the merchant interest<sup>144</sup>

---

<sup>144</sup> See also the section below; *Differentiate private versus community interests*, and chapter 5; *Regulation, law and economics*.

List sees radical free trade policy as in the interest of one special social group, the merchants, in which he includes what we may call the money managers. List exclaims,

Free trade is the fantasy of the merchants engaged in foreign commerce, (List, 1837a, p. 58)

According to List, the Cosmopolitan school does not differentiate between the interests of the nation and that of the merchant, whose interest may be very different from- and even contrary, to that of the nation,

The school does not discern that the merchant may be accomplishing his purpose (viz. gain of values by exchange) at the expense of the agriculturists and manufacturers, at the expense of the nation's productive powers, and indeed of its independence. It is all the same to him; and according to the character of his business and occupation, he need not trouble himself much respecting the manner in which the goods imported or exported by him act on the morality, the prosperity, or the power of the nation. He imports poisons as readily as medicines. ... It is therefore evident that the interest of individual merchants and the interest of the commerce of a whole nation are widely different things. ... Commerce emanates from manufactures and agriculture, and no nation which has not brought within its own borders both these main branches of production to a high state of development can attain (in our days) to any considerable amount of internal and external commerce. (List, 1841a, pp. 259-260)

At the same time List finds the merchant amusing when he like a Chameleon changes from a free trader to an adherent of state aid, as it suits his interests,

The most remarkable characteristic of the merchant who is mainly involved in the sort of commercial transactions that endanger the productive powers of his country and who is the sworn enemy of monopolies, privileges, restrictions and tariffs to protect what he calls "private industry" is the very person who leaves no stone unturned to secure for himself such aids from the state as soon as they happen to coincide with their own private interests. (List, 1837a, p. 103)

Henderson's criticises List's tendency to interpret historical events in a way that suited him, and his tendency of making assertions without making much effort to show their correctness (Henderson, 1983, p. 163), and Henderson may well be correct in many instances. Henderson also claims that List as a consequence (or as a reason...) overstated the capability and power of governments to steer economic development, which may well be true as well, but still not a valid reason for refraining to try.

Henderson (Henderson, 1983, p. 12) repeatedly criticises List for his condemnation of the merchant's role in industry. But although a firm adversary of the using the merchant principle in national economic affairs, List's view of the private merchant is rather sober, explaining that



the merchant is simply doing his job: "a merchant should not be criticised ... It is the nature of things." In the chapter called, *How do the Interests of Commerce differ from the interests of Individual Merchants?*, List claims that,

... His object is simply to make money by exchanging products and it is quite immaterial to him whether this exchange harms the productive powers of a nation or the whole world.

But a merchant should not be criticised for being indifferent to the harm that he may inflict upon a nation's productive powers because these activities are an integral part of his business. It is the nature of things that he must buy in the cheapest markets and sell in the dearest. (List, 1837a, p. 99)

List thoroughly praises the merchant for his contributions that stimulate advance and counter,

... prejudice, fanaticism, ... idleness, ... privileges ..., and .. arbitrary rule. (List, 1837a, p. 98)<sup>145</sup>

Nevertheless, it is not trade, but rather production that matters for freedom and progress, according to List,

Merchants on the whole demand "freedom" in the very widest sense - illegal and harmful freedom as well as lawful and useful freedom. But, in comparison with manufacturers, they cannot do very much to promote the development of freedom and the progress of science. (List, 1837a, p. 102)

List delivers a long list of merchant "offences" against the public interest, in peace and in war,

A merchant would have no scruples in selling factories to foreigners. ... using the money by buy cheaply in a foreign country goods ... then dump these goods in his own country and condemn thousands of workers to unemployment and starvation. ...

It is in the very nature of things that a merchant should defend absolutely unrestricted freedom of trade in this way, even if his actions are utterly at variance with the interests of commerce in general. ...

The merchant appeals to "natural law" to condemn anything which hampers his business. ...

It has been repeatedly observed that merchants engaged in foreign trade will inevitably side with their country's enemies as soon as they see that such a course of action will benefit them financially.

A merchant, unlike a philosopher, is no citizen of the world. If his own country sinks into a wretched and shameful state of bankruptcy and slavery, a merchant will take himself off to a foreign country with all his possessions. ... Adam Smith has no illusions concerning the behaviour of merchants (see Book III, chapter 4). (1) (List, 1837a, pp. 100-101)<sup>146</sup>

---

<sup>145</sup> See a more extensive quotation in *Appendix 3*.

<sup>146</sup> See a more extensive quotation in *Appendix 3*.

The translator, W.O Henderson, has here included a footnote (1), which illustrates how List was aware of the nuances in Adam Smith's arguments, and his realistic views of the merchant,

1. [The passage which List had in mind was probably the following: "A merchant, it has been said very properly, is not necessarily the citizen of any particular country. It is in a great measure indifferent to him from what place he carries on his trade; and a very trifling disgust will make him remove his capital, and together with it all the industry which it supports, from one country to another. No part of it can be said to belong to any particular country, until it has been spread as it were over the face of that country, either in buildings or in the lasting improvement of land ... The ordinary revolutions of war and government easily dry up the sources of that wealth which arises from commerce only" (*The Wealth of Nations*, Vol.1, pp. 373-4 (Everyman edition)).] (List, 1837a, p. 101, Henderson's note)

List furthermore argues that it will take qualified intervention to rescue the public interest from being hijacked by merchants,

It will need the intervention of a statesman of high character to ensure that any clash of interests between the mercantile community on the one hand and a nation, society, or humanity on the other is resolved in favour of the latter. (List, 1837a, pp. 100-101)<sup>147</sup>

In conclusion, List has a differentiated and realistic view of the merchant interest, and the need to regulate it for the national good.

### **3.28 Differentiate future from present**

List argues that regarding trade policy, the Orthodox school fails to differentiate between the future and the present, between dreams and reality.

In his introduction to *The National System*, List explains how the great divergence between theory and practice developed in political economy as a conflict between national practical needs on the one side and on the other side philosophical ideas of brotherhood and peace: The philosophical demands of the future versus the political and practical demands of the present. Political economy is therefore torn between protectionism and free trade, between regulation/intervention and laissez faire.

... although the great questions of commercial policy have been discussed by the keenest brains of all nations in books and legislative assemblies, yet the gulf between theory and practice which has existed since the time of Quesnay and Smith is not only not filled up, but gapes wider and wider each year. ... Should we not rather suppose that practical men, even if they

---

<sup>147</sup> See a more extensive quotation in *Appendix 3*.

are as a rule too much inclined to keep to the beaten track, still could not oppose the theory so long and so stubbornly if the theory were not opposed to the nature of things?

In fact, we believe that we can prove the responsibility for the divergence between the theory and practice of commercial policy to rest as much with the theorists as with the practical men. In questions of international trade, political economy must derive its teaching from experience, must adapt its measures to the needs of the present and to the particular circumstances of each nation, without neglecting the claims of the future and of mankind as a whole. Accordingly it founds itself upon philosophy, politics, and history.

Philosophy demands, in the interests of the future and of mankind, an even closer friendship among nations, avoidance of war as far as possible, the establishment and development of international law, the change of what we call the law of nations into the law of federated states, freedom of international intercourse, both in intellectual and material things; and, finally, the alliance of all nations under the rule of law that is, a universal union.

But politics demands, in the interests of each separate nation, guarantees for its independence and continued existence, special regulations to help its progress in culture, prosperity, and power, to build its society into a perfectly complete and harmoniously developed body politic, self-contained and independent. (List, 1841b, *Introduction*, in Hirst, 1909, pp.290-291)

According to List, there is a balance to strike here between the needs of the present and the needs of the future: History is on the side of the future and tells us that we are approaching a universal federation of free trade, but history and politics also tells us that nations that ignore the immediate claims of the present will perish. Political economy today (the Orthodox School) only sides with the future,

History, for its part, speaks unmistakably in favour of the claims of the future, since it teaches how the material and moral welfare of mankind has grown at all times with the growth of their political and commercial unity. But it also supports the claims of the present and of nationality when it teaches how nations which have not kept in view primarily the furtherance of their own culture and power have gone to ruin; how unrestricted trade with more advanced nations is certainly an advantage to every nation in the early stages of its development, but how each reaches a point when it can only attain to higher development and an equality with more advanced nationalities through certain restrictions on its international trade. Thus history points out the middle course between the extreme claims of philosophy and politics.

But the practice and theory of political economy in their present forms each takes sides with a faction, the one supporting the special claims of nationality, the other the one-sided demands of cosmopolitanism. (List, 1841b, *Introduction*, in Hirst, 1909, pp. 291-292)

Whereas the mercantile system erred in making present protectionism absolute, the orthodox system of Smith based on Quesnay erred in making "the most distant future's" free trade absolute. Smith therefore ignores the nation and pays attention to the teachings of history and politics when it fits its preconceived conclusions. Therefore, the Ortho-

dox theory must claim that England became rich in spite of her own commercial policy,

Practice, or, in other words, the so-called mercantile system, commits the great error of maintaining the absolute and universal advantage and necessity of restriction, because it has been advantageous and beneficial to certain nations at certain periods of their development. It does not see that restriction is only the means, and freedom is the end. Looking only at the nation, never at the individual, only at the present, never at the future, it is exclusively political and national in thought, and is devoid of philosophical outlook or cosmopolitan feeling. The ruling theory, on the contrary, founded by Adam Smith on the dreams of Quesnay, has in view only the cosmopolitan claims of the future, indeed of the most distant future. Universal union and absolute freedom of international trade, which at the present time are a cosmopolitan dream only to be realized perhaps after the lapse of centuries, can (according to the theory) be realized at the present time. It does not understand the needs of the present and the meaning of nationality in fact, it ignores national existence, and with it the principle of national independence. In its exclusive cosmopolitanism, it considers mankind only as a whole, and the welfare of the whole race, not caring for the nation or national welfare, it shudders at (i)<sup>148</sup> the teachings of politics, and condemns theory and practice as mere worthless routine. It only pays attention to history when the latter agrees with its own one-sided view, but ignores or distorts its teaching when it conflicts with the system. Indeed, it is forced even to deny the influence of the English Navigation Acts, the Methuen Treaty, and English commercial policy in general, and to maintain a view entirely contrary to truth that England has reached wealth and power not by means, but in spite of, its commercial policy. (List, 1841b, *Introduction*, in Hirst, 1909, pp. 292-293)<sup>149</sup>

List then claims that the only reason that this baseless, historically erroneous, and empirically void theory can continue to be taken seriously is due to the philosophical mood of the times, in other words due to an unrealistic ideology,

When we realize the one-sided nature of each system we can no longer wonder that the practice, in spite of serious errors, was unwilling and unable to be reformed by the theory. We understand why the theory did not wish to learn anything from history or experience, from politics or nationality. If this baseless theory is preached in every alley and from every house-top, and with the greatest fervour among those nations whose national existence it most endangers, the reason is to be found in the prevailing tendency of the age towards philanthropic experiments and the solution of philosophical problems. (List, 1841b, *Introduction*, in Hirst, 1909, p. 293)

---

<sup>148</sup> Page 293. (i) Shudders at. List borrows his phrase from Latin and writes "perhorrescirt." (Hirst's commentary note, in her translation of List's 'Introduction' to his *The National System*, Cf. List, 1841b)

<sup>149</sup> A smaller excerpt of this quotation has also been used in Ch. 6, in the section; *Contradiction between free trade theory and British practice*.

List could have mentioned that another reason why the Orthodox School failed to differentiate between the future and the present was their ignorance of the immaterial factors, such as learning. Without learning there is no change (apart from ‘external’ disruptions, such as natural disasters), and with no change the future and the present are the same. It is a static theory.

### **3.29 Differentiate stages of development: Learning**

Since the Orthodox School, according to List, is unable to differentiate the future from the present, it would only be logical that they are unable of differentiating different stages of development. And precisely so, List claims that the generalisation of the Orthodox School is unable to differentiate stages of national development,

The school recognises no distinction between nations which have attained a higher degree of economical development, and those which occupy a lower stage. (List, 1841a, p. 171)

When we introduce learning in a system, we get a dynamic system that is able to change and adapt to changed ‘external’ factors, whether human or natural. List refers to this collective learning process as an investment and as “the industrial education of the nation”,

The loss which a nation incurs by protection is only one of values, but it gains powers by which it is enabled to go on producing permanently inestimable amounts of value. ‘This loss in value should be regarded merely as the price paid for the industrial education of the nation.’ (List, 1841b, *Introduction*, in Hirst, 1909, p. 315)

### **3.30 Differentiate actual from potential**

– increasing irrelevance of natural advantages

List’s criticises Smith’s generalisations and the resulting inability to differentiate present from future takes the shape of making future free trade absolute, even now. In contrast, J. Shield Nicholson writes about List that,

The distinction between present and future advantage from the national standpoint is fundamental throughout the whole work. (Nicholson, 1904)<sup>150</sup>

---

<sup>150</sup> In the *Introductory Essay* to the 1885 translation of the National System into English (List, 1841a).

Smith has a tendency not to differentiate the actual from the potential with two opposite results: Smith first makes an imagined future absolute, and then makes the present absolute. In more detail:

In the first instance, List criticises Smith for imagining that the future is with us now (regarding free trade), in the shape of a universal republic, and therefore allowing for free trade,

In the second instance, List criticises Smith for making the present absolute (regarding the international division of labour), also for the future. Smith's system lacks dynamism.

Learning may dynamically change the table concerning production and trade advantages, and Smith does admit that artificial measures may channel a country's efforts into new manufacture. Nevertheless Smith argues that public regulation will diminish revenue and the accumulation of capital and, according to Smith's growth theory, therefore reduce growth, and apparently he holds that this loss cannot be compensated by diligence in the new line of production,

List refers to Adam Smith's argument that although protection will increase the industry of a country and render it efficient, the costs are so great that the end result is to lower growth in the long run. Smith's argument is based on his materialistic and Physiocratic conception of capital as stock and in shortage, and which must be saved and accumulated to promote growth,

Adam Smith (by means of the common expression, capital) urges the following argument against the protective commercial policy which is adopted to the present day by all his followers: 'A country can indeed by means of such (protective) regulations produce a special description of manufactures sooner than without them; and this special kind of manufactures will be able to yield after some time as cheap or still cheaper productions than the foreign country. But although in this manner we can succeed in directing national industry sooner into those channels into which it would later have flowed of its own accord, it does not in the least follow that the total amount of industry or of the incomes of the community can be increased by means of such measures.

The industry of the community can only be augmented in proportion as its capital increases, and the capital of the community can only increase in accordance with the savings which it gradually makes from its income. Now, the immediate effect of these measures is to decrease the income of the community. But it is certain that that which decreases that income cannot increase the capital more quickly than it would have been increased by itself, if it, as well as industry, had been left free.' (*Wealth of Nations*, book IV, ch. ii)

As a proof of this argument, the founder of the school adduces the well-known example, refuted by us in the previous chapter, how foolish it would be to plant the vine in Scotland. (List, 1841a, p. 225)<sup>151</sup>

---

<sup>151</sup> List's quotation carries the correct meaning but may be incorrect due to translation into German and re-translation back into English, and also due to differences in the handful editions of Smith's *Wealth of Nations*. Here is Smith's original text: "By means of such regulations, indeed, a particular

List retorts that Smith forgets a whole row of points, such as the extensive influence of industry on other socio-economic phenomena, as opposed to the effects of remaining a purely agricultural nation,

He has not considered the influence of manufactures on the internal and external commerce, on the civilisation and power of the nation, and on the maintenance of its independence, as well as on the capability arising from these of gaining material wealth. (List, 1841a, p. 227)

Besides, List considers the extra costs to be an investment that pays off in the long run, which Smith disputes,

... It is true some men will for the first year enrich themselves by political measures to the loss of individuals; but this is the expense incident to the completion of the productive power of the nation, and this first expense will after some years be ten times compensated by the benefit arising from a more perfect national economy. (List, 1827b, p. 69)

List's argument here resembles A. Hamilton's point that it is of secondary importance whether some enrich themselves as long as the primary goal is approached; that the national economy grows.

List continues by referring to the legal institution of intellectual property, namely patents, which also is a temporary monopoly - quite parallel both in function and legal status to the protection and monopoly that tariffs give,

... On giving patents for new inventions you are directed by the same views. It will encourage new inventions by securing to the inventors the first advantages of them. The community pays for these advantages, but not more than the value of the new inventions and of securing them to the whole community. Without these privileges many of the most valuable inventions would die with the inventor, as in former times. (List, 1827b, p. 69)

---

manufacture may sometimes be acquired sooner than it could have been otherwise, and after a certain time may be made at home as cheap or cheaper than in the foreign country. But though the industry of the society may be thus carried with advantage into a particular channel sooner than it could have been otherwise, it will by no means follow that the sum total, either of its industry, or of its revenue, can ever be augmented by any such regulation. The industry of the society can augment only in proportion as its capital augments, and its capital can augment only in proportion to what can be gradually saved out of its revenue. But the immediate effect of every such regulation is to diminish its revenue, and what diminishes its revenue is certainly not very likely to augment its capital faster than it would have augmented of its own accord had both capital and industry been left to find out their natural employments.

Though for want of such regulations the society should never acquire the proposed manufacture, it would not, upon that account, necessarily be the poorer in any one period of its duration. (Smith, 1776, book IV, ch. II, p. 458)

Smith further argues that a country should stick to one's last and produce what it already has a natural advantage in producing, no matter whether these natural advantages are a gift from nature or a learnt advantage. In other words, there should neither be any change in the economic structure of a nation, nor any change in the international division of labour,

... The natural advantages which one country has over another in producing particular commodities are sometimes so great that it is acknowledged by all the world to be in vain to struggle with them. By means of glasses, hotbeds, and hot walls, very good grapes can be raised in Scotland, and very good wine too can be made of them at about thirty times the expense for which at least equally good can be brought from foreign countries. ... Whether the advantages which one country has over another be natural or acquired is in this respect of no consequence. (Smith, 1776, book IV, ch. II, p. 458)

List says that theory of natural advantages to some degree is correct regarding agriculture, but not regarding manufacturing,

The school maintains, as is well known, that every nation possesses special advantages in various branches of production, which she has either derived from nature, or which she has partly acquired in the course of her career, and which under free trade compensate one another. We have in a previous chapter adduced proof that this argument is only true in reference to agriculture, in which production depends for the most part on climate and on the fertility of the soil, but that it is not true in respect to manufacturing industry, for which all nations inhabiting temperate climates have equal capability provided that they possess the necessary material, mental, social, and political qualifications. England at the present day offers the most striking proof of this. (List, 1841a, p. 385)

List argues that man and his community must perfect themselves to be able to discover and utilise nature's abundance,

The more that man and the community perfect themselves, the more are they enabled to make use of the natural powers which are within their reach for the accomplishment of their objects, and the more does the sphere of what is within their reach extend itself.. (List, 1841a, p. 210)<sup>152</sup>

List describes how primitive societies are unable to use what is directly before their eyes, since they have not the required knowledge,

The hunter does not employ the thousandth part, the shepherd not the hundredth part, of those natural advantages which surround him. The sea, foreign climates and countries, yield him either none, or at least only an inconsiderable amount of enjoyment, assistance, or stimulants to exertion.

---

<sup>152</sup> This quotation is also used in the section *Efficiency and value of resources*.



In the case of a people in a primitive agricultural condition, a large portion of the existing natural resources lies yet unutilised, and man still continues limited to his nearest surroundings. The greater part of the water power and wind power which exists, or can be obtained, is unemployed; the various mineral products which the manufacturers so well understand how to utilise profitably, lie dead; various sorts of fuel are wasted or regarded (as, for instance, peat turf) as a mere hindrance to cultivation; stone, sand, and lime are used but little as building materials; the rivers, instead of being means of freight and transport for man, or of fertilising the neighbouring fields, are allowed to devastate the country by floods; warmer climates and the sea yield to the agricultural country but few of their products.

In fact, in the agricultural State, that power of nature on which production especially depends, the natural fertility of the soil, can only be utilised to a smaller extent so long as agriculture is not supported by manufacturing industry. (List, 1841a, pp. 210-211)<sup>153</sup>

An agricultural nation, which inhabits a country of temperate climate, leaves therefore the richest part of its natural resources unutilised. List, 1841a, p. 214)<sup>154</sup>

By the establishment of industries and thereby transportation, valueless raw materials are made valuable, and an increasingly differentiated demand for products is created. Therefore production is created, differentiated and improved,

... all minerals, all metals, which heretofore were lying idle in the earth are now rendered useful and valuable. Articles which could formerly only bear a freight of a few miles, such as salt, coals, stone, marble, slate, gypsum, lime, timber, bark, &c., can now be distributed over the surface of an entire kingdom. Hence such articles, formerly quite valueless, can now assume a degree of importance in the statistical returns of the national produce, which far surpasses the total of the entire agricultural production in previous times. Not a cubic foot of water-fall will then exist which is not made to perform some service; even in the most distant districts of a manufacturing country, timber and fuel will now become valuable, of which previously no one knew how to make any use.

Through the introduction of manufactures, a demand for a quantity of articles of food and raw materials is created, to the production of which certain districts can be far more profitably devoted than to the growth of corn (the usual staple article of rude agricultural countries). The demand which now springs up for milk, butter, and meat adds a higher value to the existing pasture land, and leads to the breaking up of fallows and the erection of works of irrigation. The demand for fruit and garden produce converts the former bare agricultural land into vegetable gardens and orchards. (List, 1841a, pp. 211-212)

---

<sup>153</sup> This quotation is also used in the section *Efficiency and value of resources*.

<sup>154</sup> This quotation is also used in the section *Efficiency and value of resources*.

List does often point to the relevance of natural geographical advantages such as an abundance of raw materials and strategic location. Subcategories are climate, fertility of the soil, natural transport arteries etc.

Nevertheless, List argues that nations that are worst fitted for agriculture, are best fitted for manufacture. A hilly country with a cold climate is therefore by nature best suited to be industrialised, and by implication global leaders,

The loss which the mere agricultural State sustains by not making use of these natural powers, is so much the greater the more it is fitted by nature for carrying on manufactures, and the more its territory is adapted for the production of raw materials and natural powers which manufacturers specially require; that loss will therefore be the greatest in mountainous and hilly countries less suitable for agriculture on the whole, but which offer to manufactures plenty of water power, of minerals, timber, and stone, and to the farmer the opportunity of cultivating the products which are specially required by the manufacturer. (List, 1841a, p. 213)

List joins the argument that a harsh climate is not detrimental and a natural disadvantage, but quite in the opposite is disciplining and thereby creates habits valuable for industry and progress,

Countries with a temperate climate are (almost without exception) adapted for factories and manufacturing industry. ... the severe season of the year, which appears to the superficial observer as an unfavourable effect of nature, is the most powerful promoter of habits of energetic activity, of forethought, order, and economy.... Diligence, economy, order, and forethought are at first produced by necessity afterwards by habit, and by the steady cultivation of those virtues. Morality goes hand in hand with the exertion of one's powers and economy, and immorality with idleness and extravagance: each are reciprocally fertile sources, the one of power, the other of weakness. (List, 1841a, pp. 213.214)

The historical record tells us that some of the world's most favoured nations by nature have been able to squander its resources, Congo still being one. In addition, there is little use in blaming colonialism for miseries, since an able nation would be able to organise and defend itself. Historically, a feeble nation invites attack.

At the same time, some of the least favoured nations by nature have managed to develop best: Prussia had little else than poor soil, the Netherlands hardly had any soil and had to win it from the Sea, Japan had fish and Korea little more. What they did have was a disciplined commitment to learn and develop.

It was not obvious from this point of view that North America as a whole would take the lead in industry, since she had an abundance of natural resources, but she was blessed,<sup>155</sup> partially with a harsh climate.

---

<sup>155</sup> From an industrial point of view....

More importantly, she was blessed with the first immigrants, who established an industrial society, coming from countries with disciplined and industrious peoples like England, Germany, France, and the Netherlands.

### **3.31 Differentiate raw materials from finished products**

Concerning Smith's unwillingness or inability to differentiate, between primitive and manufactured goods; between raw materials and finished products, List writes that "goods are spoken of in general terms",

Wherever international commerce is in question, the native individual is throughout simply pitted against the foreign individual; examples from the private dealings of separate merchants are throughout the only ones adduced -- goods are spoken of in general terms (without considering whether the question is one of raw products or of manufactured articles) -- in order to prove that it is equally for the benefit of the nation whether its exports and imports consist of money, of raw materials, or of manufactured goods, and whether or not they balance one another. (List, 1841a, p. 171)

And in chapter 27, *The Customs System and the Popular School*, List again writes that the school "does not discriminate", and "recognises no distinction" regarding goods,

The popular school does not discriminate (in respect of the operation of protective duties) between natural or primitive products and manufactured products. It perverts the fact that such duties always operate injuriously on the production of primitive or natural products, into the false conclusion that they exercise an equally detrimental influence on the production of manufactured goods. (List, 1841a, p. 316)

Disregarding the differences between raw materials and finished goods also opens up for disregarding the beneficial effects of industrial policy, intervention/regulation, and the need for the state as such.

### **3.32 Differentiate nations' suitability for industry**

List claims that the "popular school" does not differentiate between nations that are not well adapted and those that are, for the introduction of manufacturing industry. His differentiating features range from geography to legal stability,

The school recognises no distinction in reference to the establishment of manufacturing industry in a State between those nations which are not adapted for such industry and those which, owing to the nature of their territory, to perfectly developed agriculture, to their civilisation, and to their just claims for guarantees for their future prosperity for their permanence,

and for their power, are clearly qualified, to establish such an industry for themselves. (List, 1841a, p. 316)

List claims that only by the use of protection, can less developed nations catch up with the more developed nations,

The school fails to perceive that under a system of perfectly free competition with more advanced manufacturing nations, a nation which is less advanced than those, although well fitted for manufacturing, can never attain to a perfectly developed manufacturing power of its own, nor to perfect national independence, without protective duties. (List, 1841a, p. 316)

List and his followers held that every nation has its particular circumstances,

... Every nation must follow its own course in developing its productive powers; or, in other words, every nation has its particular Political Economy. (List, 1827b, p. 75)

Therefore, List warns that the protective system must be adjusted to the needs of the individual nation,

In regard to the expediency of protecting measures, I observe that it depends entirely on the condition of a nation whether they are efficacious or not. (List, 1827b, p. 33)

List's criticism is an antecedent to the core arguments of the later German Historical School in economics against the orthodox school, as well as of the criticism of the past decades regarding international organisations like the IMF and IBRD (The International Bank for Reconstruction and Development - The World Bank), who largely were devoted to the same type of generalising economic policy as A. Smith, "one size fits all" economics.

### **3.33 Differentiate industries – effects of regulations**

List writes that the popular schools does not differentiate between agriculture and manufacture and therefore fails to see how regulations work in different ways on these two sections, since they have different characteristics,

The school, inasmuch as, in judging the influences of climate on the production of wealth, it has not distinguished between agriculture and manufacturing industry, has fallen into the gravest errors in respect to the advantages and disadvantages of protective regulations, ... (List, 1841a, p. 213)

Regarded in the light of day, however, it is fundamentally false, since restrictions on commercial intercourse operate quite differently on the pro-

ductive power of agriculture than they do on the productive power of manufacturing industry. (List, 1841a, p. 214)

With regard to the interchange of raw products, the school is perfectly correct in supposing that the most extensive liberty of commerce is, under all circumstances, most advantageous to the individual as well as to the entire State....

But the manufacturing productive power, on the contrary, is governed by other laws, which have, unfortunately, entirely escaped the observation of the school. (List, 1841a, p. 217)

### **3.34 Differentiate industries – effects on culture**

Speaking of merchants, as opposed to the manufacturer, List claims that their contribution to the national culture and science is meagre, and accordingly that the popular school fails to see their different scientific and cultural value for the nation,

But in comparison with manufacturers, they cannot do very much to promote the development of freedom and progress of science.

It is in the very nature of things that a manufacturer should sharpen his intellect by making a thorough study of the business in which he is engaged. And he takes a real interest in the progress of science, technology and art. A merchant, on the other hand, concentrates upon arithmetic, double entry, and the state of the stock market and these are topics which are hardly likely to elevate the spirit or improve the intellect. (List, 1837a, p. 102)

List also claims that agricultural nations offer far smaller opportunities for individual self-fulfilment due to the very limited differentiation of the economy, where bodily strength is the most favoured individual resource. A developed industrial nation, however offers to the individual a wide range of economic opportunities, in technology based production, research, education, transport, communication and administration. In addition, due to the higher level of prosperity an industrial nation allows for a far more intense and diversified cultural life.

List claims that inventions, improvements and knowledge are higher valued in the manufacturing nations, and have stronger effects than in agricultural nations,

New inventions and improvements in the mere agricultural State are of but little value. Those who occupy themselves with such things in such a State fall themselves, as a rule, a sacrifice to their investigations and endeavours, while in the manufacturing State there is no path which leads more rapidly to wealth and position than that of invention and discovery. Thus, in the manufacturing State genius is valued and rewarded more highly than skill, and skill more highly than mere physical force. In the agricultural State, however, excepting in the public service, the reverse is almost the rule. (List, 1841a, p. 202)

### 3.35 Differentiate kinds of capital – and labour

List states that the roots of national wealth, the productive power, are mental and physical, individual and social, and that the instruments of production (i.e. real capital) are results of former activity,

The nation derives its productive power from the mental and physical powers of the individuals; from their social, municipal, and political conditions and institutions; from the natural resources placed at its disposal, or from the instruments it possesses as the material products of former mental and bodily exertions (material, agricultural, manufacturing, and commercial capital). (List, 1841a, p. 224)

He then looks at the cosmopolitan orthodox school's view concerning capital, and finds it to be too generalising, and lacking in concrete real-world specificity. This leads to false reasoning he claims,

That which we understand by the term 'instrumental powers' is called 'capital' by the school. It matters but little by what word an object is signified, but it matters very much (especially with regard to scientific investigations) that the word selected should always indicate one and the same object, and never more or less. As often, therefore, as different branches of a matter are discussed, the necessity for a distinction arises. The school now understands by the term 'capital' not merely the material, but also all mental and social means of and aids to production. It clearly ought, therefore, to specify wherever it speaks of capital, whether the material capital, the material instruments of production, or the mental capital, the moral and physical powers which are inherent in individuals, or which individuals derive from social, municipal, and political conditions, are meant. The omission of this distinction, where it ought to be drawn, must necessarily lead to false reasoning, or else serve to conceal false reasoning. (List, 1841a, p. 224 ff)

List again finds the cosmopolitan orthodox school's view concerning capital, too generalising. He then discusses transferral of "capital" between different occupations in a way that supplies a strikingly acute argument of attack, undermining of also modern economics' similarly generalised notion of the term capital, which implies that capital can be moved from one industry to another instantly.

Adam Smith describes a primitive economy with little specialisation of expertise, and accordingly easy transfers of labour and capital between branches. Smith employs a rather materialist concept of capital, with 'stock' as a limiting factor. He writes,

... though a great number of people should, by thus restoring the freedom of trade, be thrown all at once out of their ordinary employment and common method of subsistence, it would by no means follow that they would thereby be deprived either of employment or subsistence. ... To the greater part of manufactures besides, it has already been observed, there are other

collateral manufactures of so similar a nature that a workman can easily transfer his industry from one of them to another. The greater part of such workmen too are occasionally employed in country labour. The stock which employed them in a particular manufacture before will still remain in the country to employ an equal number of people in some other way. The capital of the country remaining the same, the demand for labour will likewise be the same, or very nearly the same, though it may be exerted in different places and for different occupations.  
(Smith 1776, book IV, ch. II)

List concludes that the generalisation deliberately serves to promote free trade, whereas a more realistic view would speak in favour of protectionism,

The school distinguishes fixed capital from circulating capital, and classes under the former in a most remarkable manner a multitude of things which are in circulation without making any practical application whatever of this distinction. The only case in which such a distinction can be of value, it passes by without notice. ...

Vineyards have (as such) a value which, if used as arable fields, they would lose. Ships, if used for timber or for firewood, have a much lower value than when they serve as means of transport. What use can be made of manufacturing buildings, water-power, and machinery if the spinning industry is ruined? In like manner individuals lose, as a rule, the greatest part of their productive power, consisting in experience, habits, and skill, when they are displaced. The school gives to all these objects and properties the general name of capital, and would transplant them (by virtue of this terminology) at its pleasure from one field of employment to another. J. B. Say thus advises the English to divert their manufacturing capital to agriculture. How this wonder is to be accomplished he has not informed us, and it has probably remained a secret to English statesmen to the present day. ... The reason why the school so deliberately obscures things which are so clear is apparent enough. If things are called by their proper names, it is easily comprehended that the transfer of the productive powers of a nation from one field of employment to another is subject to difficulties and hazards which do not always speak in favour of 'free trade,' but very often in favour of national protection. (List, 1841a, p. 234)

Mathew Carey held similar criticisms against Smith. He was one of List's close friends and hosts in America; an Irish-American; and an early and devoted proponent of the American System. Carey set out to establish a society for the propaganda of good economic doctrines: The American System.<sup>156</sup> Mathew Carey tells us that his prime reason for

---

<sup>156</sup> In 1829 Mathew Carey writes, "The plan was to form a general society, on a more purpose of dissemination of sound doctrines on the subject of political economy, and dispelling the delusion under which our southern fellow citizens labored." (Carey, 1829, p. 144). He also lists the paragraphs of the constitution of THE SOCIETY OF POLITICAL ECONOMISTS, as being: "1. The object of this Society shall be to print and disseminate pamphlets on the subject of political economy, calculated to prove the soundness of what is styled the American Sys-

starting to write about economics was that he was provoked by what Adam Smith wrote, concerning domestic manufactures being bankrupted by foreign competition.

Mathew Carey mentions the dire consequences of the end of protection after the Anglo-American war. He argues that Smith's assertions that an easy transferral of stock and labour between branches is erroneous, since there are no collateral branches. Furthermore, if there were, a crisis would still hit collateral branches simultaneously,

These positions, absurd, futile, and untenable as they are, form the basis of the Wealth of Nations. To a person wholly unbiased by prejudice, it must be a matter of astonishment, how a work, resting on such a sandy and miserable foundation, could have obtained, and still more, have so long preserved its celebrity.

I undertook to prove that there were no such collateral branches—that if there were, they would be in the same state of depression from excessive importations, ... (Carey, 1829, p. 49)

List's and Carey's point is that professions are so specialised that there is no easy transfer of labour between professions nor between their manufactories, and that the same argument goes for manufacturing equipment, capital in production. Carey's additional point is that a crisis is general: Smith is only able to reason on the lofty level because he is generalising away the troublesome details of real life.

There is also a methodological reason for this conflict of opinions. This is due to Carey's (and List's) Idealistic, empirical and practical approach, seeing that skills and capital are difficult to transfer from one branch of industry to another. The orthodox school, however, generalised all different categories into 'money'. Accordingly, this "exchange value" school reasoned as if such transfers were just as uncomplicated in physical reality as when entities on an accounting sheet are moved from one account to another.

### **3.36 Differentiate private versus community interests<sup>157</sup>**

List claims that the principle of *Laissez faire et laissez passer*, only would be true if there were no conflict between individual and national interests, which is not true,

This principle would only be true if individual and national interest were never in opposition. But this is not the case. A country may possess many extremely rich men, but the country is poorer, because there is no equal distribution of property. Slavery may be a public calamity for the country, nevertheless some people may do very well in carrying on the slave trade and in holding slaves. Notwithstanding an absence of liberal institutions

---

tem, and the fallacy of the 'theories of Adam Smith.' (Carey, 1829, p. 148)

<sup>157</sup> See also the section above, *Public regulation of the merchant interest*, and the section *Natural rights and 'the selfish system'*, in chapter 5.



may be extremely injurious to a full development of the productive powers of the nations, some classes may find their reckoning in this bad state of things. The country may suffer from an absence of manufacturing industry, but some people may flourish in selling foreign manufactures. Canals and railroads may do great good to a nation, but all waggoners will complain of this improvement. Every new invention has some inconvenience for a number of individuals, and is nevertheless a public blessing. (List, 1827b, Letter VI, pp. 86-87)

One important point of List's criticism against Adam Smith is that the materialist tradition either disregards the difference between private business economics and national economics, or focuses exclusively on private side to economics – behaving as if this was the only reality of economics. Adam Smith writes,

The interest of a nation in its commercial relations to foreign nations is, like that of a merchant with regard to the different people with whom he deals, to buy as cheap and to sell as dear as possible. But it will be most likely to buy cheap, when by the most perfect freedom of trade... (Smith, 1776, book IV, ch. II, p. 30, and p. 464)

Smith here obviously sees no difference between private interests and public interests, meaning that he does not see any difference between values in exchange productive powers.

List on the other hand claims in his preface to *Das Nationale System*, that Cosmopolitical Economy (theory of value in exchange) and Political Economy (theory of productive powers) have to be treated apart,

There are consequently one cosmopolitical and one Political Economy, one theory of value in exchange and one theory of productive forces, doctrines which, very different from each other, must be developed independently. (List, 1841b, *Introduction*, in the German ed. p. 66, or in Hirst's translation)

In addition, in 1827 List similarly writes,

Conditions, events, etc. may be profitable in individual economy for some persons, and injurious to the community; or on the contrary, they may be injurious to individuals, and prove highly beneficial to the community: Individual economy is not political economy.

So - measures, principles can be beneficial to mankind, if followed by all nations, and yet prove injurious to some particular countries, and vice versa. Political economy is not cosmopolitical economy. ...Every nation has its particular economy. (List, 1827b, Letter 5, p. 75)

List's has a scorching characterisation of the conflicting interest of the nation as against that of the merchant. List argues that merchants support Smith's theory of value, since it is in their natural interest, and he claims that Smith's system is the true "mercantile system" "based upon the most despicable egotism",

Once more we reject the criticism that we have drawn a caricature of the truth. It is our intention to stick to the truth. We have described the merchant as he really is, as he can be, and as indeed he must necessarily be – unless a country deliberately sets limits to his lust for gain.

Merchants are the most faithful disciples of the theory of value. They invented the principles “laissez faire et laissez passer” and “buy where you can buy in the cheapest market”. The cosmopolitan economists find that merchants are their most ardent followers and spread their doctrines with the greatest enthusiasm.

And so the doctrines of Adam Smith and Say must be regarded as the true “mercantile system” – an economic theory which places the interests of those merchants who import foreign manufactured goods above those of commerce in general. It is a theory which stresses only material wealth and ignores productive powers. It is a doctrine which sacrifices a country’s future economic power, political greatness, and cultural progress in order to deceive people into believing in the “truth” of a principle which is in fact based upon the most despicable egotism.

It is indeed strange that those who most passionately denounce what they choose to call the mercantile system have in fact invented a real mercantile system all of their own – a system which exalts the hawker of foreign goods and actually includes the activities of the smuggler in the science of economics. (List, 1837a, p. 104)

Concerning the possibility of different interests between the individual and the nation, List writes that in times of war the merchant might be a natural fifth column from within, likely to ally with foreign interests. The merchant interest therefore must be tamed and regulated in the public interest, and also in the interest of commerce itself,

In the time of war he provides the enemy with arms and ammunition. He would, if it were possible, sell fields and meadows to foreign countries, and when he had sold the last bit of land would place himself on board his ship and export himself.

It is therefore evident that the interest of individual merchants and the interest of the commerce of a whole nation are widely different things. In this sense Montesquieu has well said, ‘If the State imposes restrictions on the individual merchant, it does so in the interest of commerce, and his trade is nowhere more restricted than in free and rich nations, and nowhere less so than in nations governed by despots.’(1\*) (List, 1841a, ch. 21)

List argues that radical free trade economists have taken over the merchant’s principle. He argues that sometimes the principle should be reversed, as in a slump when import duties should be reversed to support domestic production,

It is by confusing the theory of productive powers with the theory of value that economists, who support free trade, have taken over the merchant’s principle: *Laissez faire et laissez passer*. As we have seen in chapter 19 the principle should often be reversed. The more manufactured goods fall in price during a slump, the more dangerous – in the national interest – is it to buy them owing to the danger of ruining our own factories. In such circum-

stances it is vitally important to levy high import duties on these products. Merchants on the whole demand “freedom” in the very widest sense- illegal and harmful freedom as well as lawful and useful freedom. But in comparison with manufacturers, they cannot do very much to promote the development of freedom and progress of science. (List, 1837a, p. 102)

List claims that Smith and Cooper's<sup>158</sup> conscious confusion of private and public interests is a reason for his downplaying of the role of public regulation and therefore the role of the nation. List explicitly criticises the Cosmopolitan School for assuming that market forces automatically will lead to the desired goal of industrial expansion, and that government action is general harmful,

## CHAPTER THIRTEEN

### The Productive Powers of Industry (continued)

THE COSMOPOLITAN THEORISTS do not question the importance of industrial expansion. They assume, however, that this can be achieved by adopting the policy of free trade and by leaving individuals to pursue their own private interests. They believe that in such circumstances a country will automatically secure the development of those branches of manufacture which are best suited to its own particular situation. They consider that government action to stimulate the establishment of industries does more harm than good. (List, 1837a, p. 70)

The assumption that an unregulated market will serve the common good best is not only tightly related to the lack of differentiation between private and public interests; it also has old roots, even in pre-Socratic philosophy, related to the discussion of ‘private vices, public benefits’.<sup>159</sup>

In *The National System* chapter 15 (*Nationality and the Economy of the Nation*), we find an opening phrase, much like a compressed theoretical and political program and attack on the school of A. Smith. List claims that the Cosmopolitical School suffers from three main defects; boundless cosmopolitanism; dead materialism, and a disorganising particularism and individualism,

The system of the school suffers, as we have already shown in the preceding chapters, from three main defects: firstly, from boundless cosmopolitanism, which neither recognises the principle of nationality, nor takes into consideration the satisfaction of its interests; secondly, from a dead materialism, which everywhere regards chiefly the mere exchangeable value of things without taking into consideration the mental and political, the pre-

---

<sup>158</sup> Thomas Cooper, British born President of Columbia College. Declared materialist and nominalist philosopher, and the first of the North American advocates of free trade, according to Friedrich List.

<sup>159</sup> For an elaboration of these issues, see chapter 5, the section *Natural Rights and ‘the selfish system’*.

sent and the future interests, and the productive powers of the nation; thirdly, from a disorganising particularism and individualism, which, ignoring the nature and character of social labour and the operation of the union of powers in their higher consequences, considers private industry only as it would develop itself under a state of free interchange with society (i.e. with the whole human race) were that race not divided into separate national societies. (List, 1841, ch. 15, p. 174)

List then claims that the individual Nation stands between the individual and the global market (the human kind), and the individual is unconceivable without it,

Between each individual and entire humanity, however, stands THE NATION, with its special language and literature, with its peculiar origin and history, with its special manners and customs, laws and institutions, with the claims of all these for existence, independence, perfection, and continuance for the future, and with its separate territory; a society which, united by a thousand ties of mind and of interests, combines itself into one independent whole, which recognises the law of right for and within itself, and in its united character is still opposed to other societies of a similar kind in their national liberty, and consequently can only under the existing conditions of the world maintain self-existence and independence by its own power and resources. As the individual chiefly obtains by means of the nation and in the nation mental culture, power of production, security, and prosperity, so is the civilisation of the human race only conceivable and possible by means of the civilisation and development of the individual nations. (List, 1841a, ch. 15, p. 174)

List argues that a nation is much more than- and different from, the sum of the private interests,

These interests of the community are, however, infinitely different from the private interests of all the separate individuals of the nation, if each individual is to be regarded as existing for himself alone and not in the character of a member of the national community, if we regard (as Smith and Say do) individuals as mere producers and consumers, not citizens of states or members of nations; for as such, mere individuals do not concern themselves for the prosperity of future generations -- they deem it foolish (as Mr Cooper really demonstrates to us) to make certain and present sacrifices in order to endeavour to obtain a benefit which is as yet uncertain and lying in the vast field of the future (if even it possess any value at all); they care but little for the continuance of the nation -- they would expose the ships of their merchants to become the prey of every bold pirate -- they trouble themselves but little about the power, the honour, or the glory of the nation, at the most they can persuade themselves to make some material sacrifices for the education of their children, ...(List, 1841a, p. 172)

List claims that the nation is the necessary foundation and precondition for individual power and freedom. Since there often are contrasting interests between the interests of the individual and the nation, the State must impose restrictions in the public interest,

...Individuals may become rich by hazardous bank schemes, but the public may lose by them.

Without interference of national power there is no security, no faith in coined money, in measures and weights, no security for the health of seaports, no security for the commerce at sea by the aid of a navy, no interference for the citizens in foreign seaports and countries by Consuls and Ministers, no titles to land, no patents, no copyright, no canals and railroads, no national road. Industry entirely left to itself, would soon fall to ruin, and a nation letting everything alone would commit suicide. (List, 1827b, Letter VI, p. 87, Cf. 1841a, pp. 166)

Nevertheless, Smith and his followers agree that law enforcement and defence are public goods<sup>160</sup> that the state has to care for.

List comments what Smith has to say on the Hansa, and on merchants as citizens with no fatherland,

Yet some passages in his work show clearly that he was not unacquainted with the causes of the fall of the League and its results. 'A merchant,' he says, 'is not necessarily the citizen of any particular country. It is in a great measure indifferent to him from what place he carries on his trade; and a very trifling disgust will make him remove his capital, and together with it all the industry which it supports, from one country to another.'<sup>161</sup> (List, 1841a, p. 25)

The tradition of confusing private- and community interests is old, and related to the Image of Man, as either irrational or rational. Furthermore, it relates to the ancient question that Mandeville termed 'private vices, public benefits', meaning the question of whether private vices can be used for the public benefit. This is an ancient pre-Socratic belief that was revived with the Enlightenment, and the theory of natural rights.<sup>162</sup>

List often criticized the radical market school for their extreme and anti-social individualism, which he claimed would be destructive to communities – in opposition to his own idealistic- and socially oriented individualism. (Cf. List, 1841a, ch. 14, pp. 169-171)

List's criticisms are almost endless regarding Smith's confusions of short-term private interests and -characteristics versus national economic interests and -characteristics (Cf. e.g. List, 1827b, Letter 5, p. 75, List, 1841a, pp. 169-172). List devoted a whole chapter in his *National System* to this difference (Cf. List, 1841a, ch. 14, 'Private and national economy', pp. 163-173). Hildegard Schwab-Felisch has edited a collection of List's writings on this issue, called *A Selection of Writings on National Interests and Private Business* (Cf. List, 1914).

---

<sup>160</sup> For a discussion on public goods, see chapter 5, the section *Public Goods*.

<sup>161</sup> Smith, *Wealth of Nations*, Book III, ch. iv. (List's note)

<sup>162</sup> For an elaboration of these issues, see chapter 5, the section *Natural Rights and 'the selfish system'*.

...Individuals may become rich by hazardous bank schemes, but the public may lose by them. (List, 1827b, Letter VI, p. 87, Cf. 1841a, pp. 166)

List deals repeatedly and extensively with the difference between private and public interests, such as in the chapter *Private and National Economy* in his *National System* (Cf. List, 1841a, pp. 163ff).

One of List's very basic argument against Smith, was that his materialist, static, and superficial generalisations hid the crucial differences that made the state and different policies in different circumstances necessary - concerning types of goods, capital, markets, institutions, private vs. public interests, historical stage of development, the role of time in general and of learning. In particular, this concerned the difference between private versus public interest, between commodities and refined goods and the level of development of a nation in all respects.

List claimed the short-term merchant interest and its accompanying monetarist outlook to be Smith's point of departure. Thereby Smith could overlook the necessity of installing an active government that would create a policy that differentiates, and therefore would defend the macro point of interest, by establishing regulations and legal arrangements, nationally and internationally.

With some irony, List comments that according to Smith, a 'nation' of 'disorganised' individuals must constitute the highest state of bliss,

... if every individual can provide best for himself, that nation must be the richest in which every individual is most left to himself.' The adherents of the American system of protection had opposed themselves to this argument, which had formerly been adduced by importing merchants in favour of free trade...

Thus the popular school, which had begun by ignoring the principles of nationality and national interests, finally comes to the point of altogether denying their existence, and of leaving individuals to defend them as they may solely by their own individual powers.

How? Is the wisdom of private economy, also wisdom in national economy? Is it in the nature of individuals to take into consideration the wants of future centuries, as those concern the nature of the nation and the State? (List, 1841a, pp. 164-165)

List here defends the Platonic-Aristotelian insight that different levels of existence are different realms, ruled by different laws under different circumstances, and they ought therefore to be judged and treated differently, in theory and practice.

### **3.37 Generalisations play down regulation and nation**

In his generalisations, Smith managed, largely, to exclude the non-monetary and immaterial factors, in particular the role of institutions and regulation, List claimed. In addition, he argues that his own economic strategy would also promote these basic factors for economic development

that Smith mainly overlooked. In contrast, List saw the immaterial factors as the most important for the development of economics as well as civilisation in general.

In more detail: List argues that the generalisations that Smith makes, largely based in his materialistic philosophy, play down the importance of institutions - except private companies. Apparently, Smith's deliberate "ignorance" concerns only public institutions.

Thereby Smith plays down and disguises the role for regulation, and the nation. Smith's basic philosophy therefore has practical political consequences, just like the epistemology of Hobbes and Locke. A chosen *Image of Man* therefore has political and economic consequences.

More specifically, List claims that Adam Smith's and Thomas Cooper's (Smith 1776 and Cooper, 1825) conscious confusion of private and public interests is a major reason for their playing down of the role of public regulation, lawmaking, and therefore the role of the nation (Cf. List, 1827b, Letter VI, p. 87; cf. 1841a, p. 166).

As a consequence of deliberately confusing the principles of private economy and national economy, and denying the sometimes existent fact of a conflict of interest between private and community interest, A. Smith, makes the logical mistake of playing down the necessity of organised action through the institution of the nation, claims List,

We have proved historically that the unity of the nation forms the fundamental condition of lasting national prosperity... In the present chapter we have now to demonstrate how the popular school has concealed its misunderstanding of the national interests and of the effects of national union of powers, by confounding the principles of private economy with those of national economy.

'What is prudence in the conduct of every private family,' says Adam Smith, <sup>163</sup>'can scarce be folly in that of a great kingdom.' Every individual in pursuing his own interests necessarily promotes thereby also the interests of the community. It is evident that every individual, inasmuch as he knows his own local circumstances best and pays most attention to his occupation, is far better able to judge than the statesman or legislator how his capital can most profitably be invested. ...

Adam Smith concludes from this: 'Restrictions on trade imposed on the behalf of the internal industry of a country, are mere folly ... (Smith, 1776, book IV, ch. ii) (List, 1841a, ch. 14: *Private and National Economy*, p. 163)

Adam Smith here makes the classic 'mental jump', known in the literature of philosophy of science as a 'fallacy of the wrong level'; or simply 'level fallacy'; or more specifically as 'Fallacy of Composition' or the 'Reductionist Fallacy'; He assumes that circumstances and conclusions on one level of argument (private economy) may automatically be transferred to another level (national economy).<sup>164</sup>

---

<sup>163</sup> 1. Wealth of Nations, Book IV. chap. ii., (List's note)

<sup>164</sup> Regarding 'Reductionism' see, the section, *Reductionism*, in chapter 2 and *Materialist reductionism*, in chapter 3.

The reductionist point in this connection, meaning Adam Smith's example, is that the private investor has a different setting than the nation; e.g. different goals and different restrictions. Whereas the investor maximises individual profit on a relative short-term horizon, a modern nation, in principle, optimises the well-being of all citizens in a long-term perspective (at least over decades) and is thus forced to make different evaluations than those of an individual investor.

We may counter Smith's argument with one example where private prudence becomes public folly: Parsimony may in some circumstances be well for a family, but as a general policy it dooms a nation to idleness and poverty, as e.g. List pointed out (See the section above; *Counterproductive saving*).

List sarcastically explains why the theory of self-interest and laissez faire recruited a large following, the former because people in general now could "get rid of the hateful duties" of morality, and statesmen could follow a policy where "all one had to do was to fold one's hands". Therefore, in essence, the theory's popularity was due to high vested private interests and low morality,

It was also well known before, that work leads to wealth, and idleness to beggary; that private self-interest is the most powerful stimulus to active industry; and that he who desires to obtain young chickens, must not first eat the eggs. Certainly people had not known before that all this was political economy; but they were delighted to be initiated with so little trouble into the deepest mysteries of the science, and thus to get rid of the hateful duties which make our favourite luxuries so dear, and to get perpetual peace, universal brotherhood, and the millennium into the bargain.

It is also no cause for surprise that so many learned men and State officials ranked themselves among the admirers of Smith and Say; for the principle of 'laissez faire et laissez aller' demands no sagacity from any save those who first introduced and expounded it; authors who succeeded them had nothing to do but to reiterate, embellish, and elucidate their argument; and who might not feel the wish and have the ability to be a great statesman, if all one had to do was to fold one's hands in one's bosom? It is a strange peculiarity of these systems, that one need only adopt their first propositions, and let oneself be led credulously and confidingly by the hand by the author, through a few chapters, and one is lost. (List, 1841a, pp. 356)

There are often conflicts, List claims, between private and public interests. Furthermore, if the nation does not protect the public interest, the nation will fall into decay. Therefore, the State must regulate industry, in the public interest,

In a thousand cases the power of the State is compelled to impose restrictions on private industry. It prevents the shipowner from taking on board slaves on the west coast of Africa, and taking them over to America. It imposes regulations as to the building of steamers and the rules of navigation at sea, in order that passengers and sailors may not be sacrificed to the avarice and caprice of the captains. (List, 1841a, p. 166)



... For similar reasons the State is not merely justified in imposing, but bound to impose, certain regulations and restrictions on commerce (which is in itself harmless) for the best interests of the nation. (List, 1841a, p. 167)

In his *The End of Laissez-Faire*, John Maynard Keynes later followed List in his argument that there may well be reasons to regulate the private interest,

It is not a correct deduction from the principles of economics that enlightened self-interest always operates in the public interest. Nor is it true that self-interest generally is enlightened; more often individuals acting separately to promote their own ends are too ignorant or too weak to attain even these. Experience does not show that individuals, when they make up a social unit, are always less clear-sighted than when they act separately.

We cannot therefore settle on abstract grounds, ... (Keynes, 1926, Ch. 4)

List warns against letting the interests of commerce dominate production, manufacturing and agriculture. He lambasts the Cosmopolitan school of doing exactly that and says that this is a logical outcome of their point of departure, by looking at present values instead of the productive powers,

... For similar reasons the State is not merely justified in imposing, but bound to impose, certain regulations and restrictions on commerce (which is in itself harmless) for the best interests of the nation. (List, 1841a, p. 167)

Commerce is also certainly productive (as the Laissez-Faire school maintains); but it is so in quite a different manner from agriculture and manufactures. These latter actually produce goods, commerce only brings about the exchange of goods ... From this it follows that commerce must be regulated, according to the interests and wants of agriculture and manufactures, not *vice-versâ*.

But the school has exactly reversed this last dictum by adopting as a favourite expression by adopting as a favourite expression the saying of old Gournay, 'Laissez-faire, laissez-passez', an expression which sounds no less agreeable to cheats and thieves than to the merchant, and is on that account rather doubtful as a maxim. This perversity of surrendering the interests of manufactures and agriculture to the demands of commerce without reservation, is a natural consequence of that theory which everywhere merely takes into account present values, but nowhere the powers that produce them, and regards the whole world as but one *indivisible republic of merchants*. (List, 1841a, p. 259)<sup>165</sup>

Nevertheless, List was no admirer of regulation for its own sake, but saw clear advantages of regulation for justice and prosperity in opposition to the principle of *laissez faire et laissez passer*.

---

<sup>165</sup> This quotation has also been used, in the section *A sudden & universal republic of merchants*, in chapter 7.

... Individuals without the regulation of a society are savages. ... Here too the truth lies in the middle. It is bad policy to regulate everything and to promote everything, by employing social powers, where things may better regulate themselves and can be better promoted by private exertions; but it is no less bad policy to let those things alone which can only be promoted by interfering social power.

Look around, and you see everywhere the exertions and acts of individuals restricted, regulated, or promoted, on the principle of the common welfare. The commonplace of *laissez faire et laissez passer*, invented by a merchant [Footnote: ... Mr.de Gournay..] can therefore only be alleged sincerely by these merchants. (List, 1827b, Letter VI, p. 85)

### 3.38 Critic of Malthus' materialism

The question of material consumption versus production is put on the edge in the discussion of sustainable population growth. This leads us to the question of the Image of Man, sufficiently creative or not?

List writes that besides geographical factors, the crucial factors for progress are creativity, co-operation and collective willpower,

... At best the "cosmopolitan system" lays far greater stress upon material objects than upon the creative power which makes possible the production of material goods. (List, 1837a, p. 180)

... all that is required of the Governments can be expressed in one word, and that is – ENERGY. (List, 1841a, p. 435)<sup>166</sup>

The view of immaterial production factors, wit and will, as paramount for progress or not, will reveal itself on a scale of issues from the individual to the collective level. The general attitude to these problems is revealed by the attitude towards technology based on individual creativity, and by the attitude towards the potential for positive political intervention in order to promote individual creativity. This has both technological and political aspects.

List's specific answer to the question of whether population growth was sustainable was a clear confirmation of his belief in human creativity, and an attack upon the pessimists represented by Thomas Malthus. List writes,

... the increase of capital of matter will outstrip even the increase of population, if the community be wise enough to employ its capital of mind in order to develop and use the capital of nature with which it is blessed. (List, 1827b, p. 67)

---

<sup>166</sup> This little quote has also been used elsewhere in the section; *Realist and Idealist Methods*, in chapter 2; and in the sections *Capital of mind*, and *Immaterial forces as basis for entrepreneurship*, in chapter 4.

In a lengthy attack on Malthus, List insists that one has to look at the problem in the long term and therefore employ a dynamic perspective as well as a wide cultural perspective that enables the whole scope of the problem to come into view,

It is not true that population increases in a larger proportion than production of the means of subsistence; it is at least foolish to assume such disproportion, or to attempt to prove it by artificial calculations or sophistical arguments, so long as on the globe a mass of natural forces still lies inert by means of which ten times or perhaps a hundred times more people than are now living can be sustained. It is mere narrow-mindedness to consider the present extent of the productive forces as the test of how many persons could be supported on a given area of land. The savage, the hunter, and the fisherman, according to his own calculation, would not find room enough for one million persons, the shepherd not for ten millions, the raw agriculturist not for one hundred millions on the whole globe; and yet two hundred millions are living at present in Europe alone. The culture of the potato and of food-yielding plants, and the more recent improvements made in agriculture generally, have increased tenfold the productive powers of the human race for the creation of the means of subsistence. In the Middle Ages the yield of wheat of an acre of land in England was fourfold, to-day it is ten to twenty fold, and in addition to that five times more land is cultivated. In many European countries (the soil of which possesses the same natural fertility as that of England) the yield at present does not exceed fourfold. (List, 1841a, p. 128)

List goes on by praising human inventiveness and then claiming that Malthus's doctrine is not only utterly immoral but also destructive of civilisation itself,

Who will venture to set further limits to the discoveries, inventions, and improvements of the human race? Agricultural chemistry is still in its infancy; who can tell that to-morrow, by means of a new invention or discovery, the produce of the soil may not be increased five or ten fold? We already possess, in the artesian well, the means of converting unfertile wastes into rich corn fields; and what unknown forces may not yet be hidden in the interior of the earth? Let us merely suppose that through a new discovery we were enabled to produce heat everywhere very cheaply and without the aid of the fuels at present known: what spaces of land could thus be utilised for cultivation, and in what an incalculable degree would the yield of a given area of land be increased? If Malthus' doctrine appears to us in its tendency narrow-minded, it is also in the methods by which it could act an unnatural one, which destroys morality and power, and is simply horrible. It seeks to destroy a desire which nature uses as the most active means for inciting men to exert body and mind, and to awaken and support their nobler feelings -- a desire to which humanity for the greater part owes its progress. It would elevate the most heartless egotism to the position of a law; it requires us to close our hearts against the starving man, because if we hand him food and drink, another might starve in his place in thirty years' time. It substitutes cold calculation for sympathy. This doctrine tends to convert the hearts of men into stones. But what could be finally

expected of a nation whose citizens should carry stones instead of hearts in their bosoms? What else than the total destruction of all morality, and with it of all productive forces, and therefore of all the wealth, civilisation, and power of the nation? (List, 1841a, pp. 128-129)

Now, J. S. Nicholson does not much agree with List, and is as usual fairly critical of List's abilities to understand British economists,

Malthus, it may be observed incidentally, is another great writer whom List has utterly misrepresented through relying on popular dogma instead of going to the original source. The account given by List of the errors of Malthus (p. 103 *et seq.*) is curious and perversely wrong. (Nicholson, 1904)

Wilhelm Roscher would surely have agreed with Nicholson, since Roscher dearly praises Malthus' high morals on the basis of his *Principles of Political Economy* (Cf. Malthus, 1836),

... the representative of the science, who has been most attacked and who has been held up as a picture of impassible insensibility; on whom have been heaped the most bloody outrages, is Malthus. Let us hear him.

... he goes on to say, that he knows nothing more detestable than the idea of knowingly condemning the laboring classes to cover themselves with rags, to lodge in wretched huts, to enable us to sell a few more stuffs and calicoes to foreign countries. ...

Certain it is, that no defender, however determined, of the laboring classes, has said anything stronger or more deeply felt. The reason is, that nothing was more foreign to Malthus' ideas than the systematic rigidity of mathematical theories of wealth; that, a minister of the Gospel, he had meditated on its high precepts. His whole doctrine is based on the moral idea. (Roscher, 1877, p. 44)

But, Malthus' has written more than one book, and having read Malthus' *Essay on the Principles of Population, as it affects the Future Improvement of Society with remarks on the Speculations of Mr. Godwin, M. Condorcet, and Other Writers*, there is sufficient reason to state that Nicholson is wrong in this case. This is especially so, since List aims not at Malthus' entire and later authorship, but rather at Malthus' 'doctrine' of population, as it was explained in his *Principles of Population*. List thus hits the nail on its head;

First by pointing to Malthus' disbelief in human inventiveness, and secondly by pointing to Malthus' concluding recommendation of not coming to the aid of the poor, and more so: in the name of humanism.

Malthus was a cunning rhetorician, whose book was from the start a political argument, using dubious empirical "facts" and disbelief in the human mind. Malthus wrote his book as a polemic against William Godwin (Godwin, 1793) and Marquis de Condorcet (Condorcet, 1795), who believed that the human spirit would tackle problems, including a growing population. Malthus fundamental view is, principally, that man is a sensuous beast without the creative powers to support himself. Malthus writes, in the style typical of the British Classical tradition,

best characterised as materialism with a spiritual facade. Malthus *Essay* has many expressions of sensualist, materialist thinking of which the following are illustrative of a train of thought that makes sensualism the driver of progress,

It is to the established administration of property and to the apparently narrow principle of self-love that we are indebted for all the noblest exertions of human genius, all the finer and more delicate emotions of the soul, for everything, indeed, that distinguishes the civilized from the savage state,... (Malthus, 1798, p.176)

Necessity has been with great truth called the mother of invention. ... Locke, if I recollect, says that the endeavour to avoid pain rather than the pursuit of pleasure is the great stimulus to action in life: ... If Locke's idea be just, and there is great reason to think that it is, evil seems to be necessary to create exertion, and exertion seems evidently necessary to create mind. (Malthus, 1798, p.203)

Had population and food increased in the same ratio, it is probable that man might never have emerged from the savage state. ... (Malthus, 1798, p.206)

When the mind has been wakened into activity by the passions, and the wants of the body, intellectual wants arise, and the desire of knowledge,... (Malthus, 1798, p.211)

Malthus' (dominant) disbelief in scientific and technical progress was and is empirically incorrect. List was right in his view that Malthus was empirically incorrect. He was also right in claiming that Malthus' theory had immoral consequences. Malthus did not express much faith in willed improvement of Man and Society, e.g. through governmental interference,

..., this argument seems to be conclusive, not only against the perfectibility of man, ... but against any very marked and striking reform for the better, in the form and structure of society, by which I mean any great and decided amelioration of the condition of the lower classes of mankind, ... the most important part of the human race. (Malthus, 1798, p.172)

Whether a government could with advantage to society interfere to repress the inequalities of fortunes may be a matter of doubt. (Malthus, 1798, p.177)

### **3.39 Roscher, Schmoller and Schumpeter on Malthus**

It is interesting to note whether the leading German speaking economists followed List in this position. Gustav Schmoller clearly does, while Joseph Schumpeter does not. Wilhelm Roscher takes a somewhat indecisive position, but generally follows List and the German tradition after the devastating *Thirty Years War*.

Wilhelm Roscher, the leading figure of the older German Historical School, exposes the same generally optimistic opinion throughout his *Principles*, but the chapter dealing with Malthus, has a more reserved taint to it. Roscher airs several reservations to optimism, but also criticises Malthus' unsocial attitudes (Roscher, 1877, book V, ch. I, § 238-243). Here is an example of Roscher's positive attitude where he writes that a dense population is by itself a productive force,

The nation's economy attains its full development wherever the greatest number of human beings simultaneously find the fullest satisfaction of their wants. A dense population is not only a symptom of the existence of great productive forces carried to a high point of utilization; ... but is itself a productive force, ... and of the utmost importance as a spur and as auxiliary to the utilization of all other forces. (Roscher, 1877, §253)

Gustav Schmoller, the leading figure of the younger German Historical School was as clear as List had been, and states that a dense population is "the precondition for the higher culture",

Checks and migrations intervene importantly in population growth and – movement. But the important question for a rapidly growing population still always remains, if and to what degree, under which preconditions, she may increase in her own territory. The densification of the population is the natural result of sound conditions, as it is the precondition for the higher culture. (Schmoller, 1900, vol. I, § 75, p. 184)<sup>167</sup>

The arguments of Roscher and Schmoller agree very much with List's arguments for the positive effects of towns, regarding freedom, science, innovation and general elevation of culture and civilisation (Cf. e.g., the section *Urbanisation furthers communication, innovation and freedom*).

On the other hand, Joseph Alois Schumpeter claims, much like Malthus, that population growth is a result of development and not a cause,

Already Marx exclaimed the lapidary sentence: "Capitalism has stamped populations out of the ground." This is true, indeed, and the causal relationship can clearly be seen. In general, development and partly its repercussions facilitate the establishment of families and open up new possibilities for single individuals. This is certainly true to a certain degree. Insofar, as it is true, the increase in population is a consequence and not a cause of development. (Schumpeter, 1911, ch. 7)

As we shall see below, Schumpeter follows the English Classical School in several important areas, by preferring a formal 'monetary'

---

<sup>167</sup> The last sentence in its German original: " Die Verdichtung der Bevölkerung ist das natürliche Ergebnis gesunder Zustände, wie es die Voraussetzung der höheren Kultur ist."

method in economics, regarding population growth, and by holding a negative view of underconsumption theories.

### 3.40 Malthus and the social question - Distribution

Malthus population theory came about as a reply to “the social question” that arose in the late 18<sup>th</sup> Century. Following the immense Icelandic volcano eruptions in 1783-84, bad harvests in Europe followed.<sup>168</sup> This created a poverty problem and combined with a luxurious lifestyle among the rich, the French Revolution was one outcome. Similar social tendencies were seen in Great Britain, and the father of modern anarchism, William Godwin, spoke out for a better distribution of the wealth in his *An Enquiry Concerning Political Justice* (Godwin, 1793). Malthus retaliated with his famous *Essay on the Principle of Population, as it affects the Future Improvement of Society ...* (Malthus, 1798).

Malthus’ book and theory was therefore political even before it appeared. It was designed as an argument in a political fight. A debate ensued regarding the “perfectibility of society”, where Malthus argued against social remedies to alleviate poverty, as they rather would increase the problem.

The essence of Malthus’ system is first his lack of belief in the “perfectibility of society” or improvement as we might say today, and then his assumption of decreasing returns in agriculture.

The originally Austrian economic historian, Karl Polanyi, argues that “the Speenhamland law”<sup>169</sup> is the vital historical background for the problem of pauperism and the Poor Law in Britain, and it was also the reason for a lacking free labour market in England,

... the Poor Law discussion formed the minds of Bentham and Burke, Godwin and Malthus, Ricardo and Marx, Robert Owen and John Stuart Mill,

---

<sup>168</sup> The Icelandic *Laki* volcano system erupted over an 8 month period during 1783-1784, killed 50% the livestock, and the resulting famine killed 25% of the population. The following years brought bad harvests in Europe, and it has been estimated that two million people were killed globally, by the deadliest volcanic eruption known in history.

<sup>169</sup>The Speenhamland law was in practice between 1795 to 1834, providing every parish subject with a necessary minimum income, from which is subtracted any income they might acquire by themselves and also locking them to their particular parish. The law effectively blocked the creation of a free labour market in Great Britain in this period and thereby made it impossible to attract labour by offering higher wages as well as making it unnecessary for any employer to pay labourers a decent wage. Besides, the law, it is argued, blocked any interest by the worker for the result of his work. Nevertheless, Polanyi argues that the immediate effects after the abolishment of the law in 1834 were incomparably worse; “Never perhaps in all modern history has a more ruthless act of social reform been perpetrated; it crushed multitudes of lives ... (Polanyi, 1944, pp. 82-83)

Darwin and Spencer, who shared with the French Revolution the spiritual parentage of nineteenth century civilization. It was in the decades following Speenhamland and the Poor Law Reform that the mind of man turned towards his own community with a new anguish of concern: ... that of laws governing a complex society. Although the emergence of society in this new and distinctive sense happened in the economic field, its reference was universal.

The form in which the nascent reality came to our consciousness was political economy. (Polanyi, 1944, p. 84)

The effects of Speenhamland, is the original problem and necessary background for understanding the social circumstances under which the debate over the Poor Law emerged. Speenhamland is therefore also the background for the formation of the economics of Malthus and Ricardo who therefore, Polanyi argues, completely misunderstood the way capitalism functions under more normal circumstances. Polanyi lays out the socio-historical background,

... the degenerative process started by Speenhamland left its indefiable mark on the country [see footnote above]. ... It was this bond, we submit, on which the new law of wages and of population rested. (Polanyi, 1944, p. 122)<sup>170</sup>

### **3.41 Malthus' assumptions**

Throughout his *Principles of Population*, Malthus uses the same rhetorical structure. He first states his good intentions, then states the premises or "facts" and finally draws a "logical" conclusion. Malthus writes,

Consequently, if the premises are just, the argument is conclusive against the perfectibility of the mass of mankind. (Malthus, 1798, p. 72)

Malthus was of course well aware of technical improvements, but he argues that institutional social and technical change were ineffective in supplying sufficient foods and in achieving control over the size of a population.

---

<sup>170</sup>An expanded quotation from Polanyi reads; "Malthus himself, like Burke and Bentham, was violently opposed to Speenhamland and advocated complete repeal of the Poor Law. Neither of them had foreseen that Speenhamland would force the wages of the laborer down to subsistence level and below; on the contrary they expected that it would force wages up, or at least maintain them artificially, which, but for the Anti-Combination Laws, might well have been the case. This false assumption helps to explain why the low level of rural wages was not traced by them to Speenhamland, which was its actual cause, but was regarded as incontrovertible proof of the working of the so-called iron law of wages. To this foundation of the new economic science we must now turn. ..." (Polanyi, 1944, p. 122)



The conclusion Malthus draws from his premises is that mankind is running out of arable land to feed its increasing population, and that technical improvements do not suffice to compensate for this increasing disparity. He furthermore draws the conclusion that mankind has to restrain its numbers by various means, primarily moral restraint and abstention from relief of the poor, and in particular, the *Poor Law* of England.

### 3.42 Malthus' heirs in the English Classical School

The essence of British Classical Economics is based in the Enlightenment tradition of Natural Rights.<sup>171</sup> It may, on a superficial level be said to be the (scholastic-Aristotelian) formalistic deductive methodology and these two "empirical" assumptions; of the greediness of man and of the elasticities of scale in production; less than one for agriculture and one for industry.<sup>172</sup> This point of departure indicates how any question will be answered, since in a logical deductive system the conclusion depend singularly on the premise, as also Malthus argues.

The first empirical assumption of the Classical School was popularly termed 'economic man'; that any agent will act according to his own interests. The second assumption was popularly termed Malthus' "law" of diminishing returns. It concerned production in agriculture and combined with increasing growth of population, this would lead to stagnation and eventually hunger.

The idea of a stationary economy and economic collapse is not an invention of the ecological movement of the 20<sup>th</sup> Century, but is the common trait among the British classical economists based on the Malthusian assumptions, which were inherent also in Smith's system.

Malthus's pessimistic assumptions lived on with the dominating British economist in the 19<sup>th</sup> Century, first Ricardo, then J.S. Mill and finally with Alfred Marshall. John Stuart Mill was the leading British economist in the second half of the 19<sup>th</sup> Century. In his *Principles of Political Economy* (1848), and repeated in all later editions, he states his belief in the Stationary State. Mill claims that technical improvements has not improved life for humanity,<sup>173</sup>

---

<sup>171</sup> See also the section *Natural Rights and 'the selfish system'*, in chapter 5.

<sup>172</sup> Polanyi argues that the British agricultural production system, with the classes of landlord, capitalist and labourer, was so historically unique, an isolated case, that it has little permanent interest and that therefore Marx is the first economist of the British school who deserve interest for studies of industrial societies. (Polanyi, 1944) It is interesting to see that Polanyi quite correctly, classifies Marx a part of the British School ....

<sup>173</sup> Indicating that he did not see any signs of improvement in the human lot, he did not change the wording of "hitherto" to "formerly" in any of the seven editions (1848, 1849, 1852, 1857, 1862, 1865, and 1871).

Hitherto it is questionable if all the mechanical inventions yet made have lightened the day's toil of any human being. They have enabled a greater population to live the same life of drudgery and imprisonment, and an increased number of manufacturers and others to make fortunes. They have increased the comforts of the middle classes. But they have not yet begun to effect those great changes in human destiny, which it is in their nature and in their futurity to accomplish. Only when, in addition to just institutions, the increase of mankind shall be under the deliberate guidance of judicious foresight, can the conquests made from the powers of nature by the intellect and energy of scientific discoverers, become the common property of the species, and the means of improving and elevating the universal lot. (Mill, 1848, book IV, ch. VI)

### 3.43 Edwin Cannan's criticism of Malthus

In his, *A Review of Economic Theory*, Edwin Cannan launched a devastating and deeply sarcastic critique of Malthus and his followers, including J. S. Mill. Cannan charged that since scarcity is not peculiar to agriculture, neither are rents. This important point has not been much acknowledged. Describing Malthus' theory of 'diminishing returns', Cannan writes,

"... the value of land is dependent on diminishing returns." But if this is true of land, it is equally true of any other materials or instruments. Coals, houses, horses, and automobiles may be divided into grades, and if we suppose such plenty of the highest grade that anyone can have as much as he likes, even that grade will have no value. (Cannan, 1929, ch. VIII, § 5, p. 238)

Cannan describes how this theory of diminishing returns remained a central part of the orthodox English doctrine, and was criticised by Hodgskin, Chalmers and more effectively by Henry Carey, without being noticed by the believers in the discredited religion,

This grotesque theory became and remained what may be called the orthodox English doctrine for more than a generation. J.S.Mill made a pitiful attempt to restate and improve it, and long after his time it was taught to unfortunate youth, rather weakly in Fawcett's *Manual* and more uncompromisingly Mrs. Fawcett's *Political Economy for Beginners*.

Hodgskin, in his *Popular Political Economy*, 1827 (pp. 226, 267), Chalmers, in his *Political Economy in connection with the moral state and moral aspects of Society*, 1832 (chap. i. §§ 2-7), and more effectively, H. Carey, *Principles of Political Economy*, Pt. I, 1837 (p.58), all pointed out the very obvious fact that the returns to agricultural labour had actually not diminished but had greatly increased in the course of "the progress of civilisation." This, of course, knocked the bottom out of the theory that the historical fall of the rate of profit was due to diminution of agricultural returns. But the believers in that theory took no notice, and the public clings to a discredited economic theory, as it does to a discredited religion, until a better is provided. (Edwin Cannan, 1929, ch. IX, § 3, p. 260)

Polanyi writes that Lauderdale, Longfield and von Thünen found a better theory of interest,

Eventually a better theory was found in the doctrine that interests depend on the quantity and the utility of accumulated material equipment. Lord Lauderdale in his *Inquiry into the Nature and Origin of Public Wealth*, 1804, Mountiford Longfield in his *Lectures*, 1834, and von Thünen in *Der Isolierte Staat*, 1st ed., 1842, all conceived the return on capital as arising from the fact that suitable instruments enable labour to produce more ... (Cannan, 1929, ch. IX, § 4, p. 260)

Cannan also gravely criticises, in particular Malthus' "followers", but also Malthus' popular theory, ripping apart his notion of geometrical and arithmetical growth ratios. Cannan states that,

This is complete nonsense. ...Where he went wrong was in treating the increase of food production as it was some kind of natural phenomenon with which the amount of human industry had nothing to do, and in trying to get a general rule of growth from a speculation about the future rather than from past history. The most obvious factor in producing food is the number of persons ... and if the increase of production of food has always been in the arithmetical ratio in the past, the increase of population must have been so as well, which is entirely contrary to all historical evidence, sacred and profane, and is never claimed by Malthus. (Cannan, 1929, ch. IV, § 2, pp. 70-72)

The law of diminishing returns had been stated by Turgot thirty years before Malthus wrote, and that too in a form much superior to that in which it became current in England after the Napoleonic war. ...

To suppose, as many writers about Malthus have done, that his *Essay* enunciated the law of diminishing returns in opposition to the agricultural enthusiast's view and founded his main argument on that law is a mistake.

...

What Malthus always had in mind was not the idea that with increasing numbers there would be less and less land per head, but that as time goes on it will be more and more difficult to make the necessary changes of "improvements". (Cannan, 1929, § 3, p. 74)

The "law of diminishing returns," on the other hand, in none of the numerous forms in which it has been framed, has never said anything of the annual or quarter-century additions to produce; it has always related to the additions which can be made by given quantities of labour, or of capital or some compound of "capital and labour. We are not entitled to say that Malthus founded the *Essay* on the law of diminishing returns merely because he used sometimes uses the word "diminishing" in speaking of something else than the subject of the law. ... But by the other economists it was immediately recognized as an excellent substitute for his geometrical and arithmetical ratios. (Cannan, 1929, § 3, p. 78)

### 3.44 Materialist reductionism - breeds ignorance

The model used by Malthus, Townsend's tale of the island of Fernandez populated with goats, was taken from the animal realm and therefore excluded the intervention of both the human mind and Government. From these premises conclusions were drawn about human society. In philosophy of science, this is called 'reductionism',<sup>174</sup> deducing conclusions on a higher level of existence from a lower level.

The opposite is a method also Leibniz promoted, namely to conjecture from a higher level of existence such as a totality. Here it is argued, that to thoroughly understand a singular process, it is helpful to have an idea of the end result, the goal, or the connection to the whole.

Polanyi comments Malthus' reductionism such,

Here was a new starting point for political science. By approaching human community from the animal side, Townsend by-passed the supposedly unavoidable question as to the foundations of government, and in doing so introduced a new concept of law into human affairs, that of the law of Nature. Hobbes' geometrical bias, as well as Hume's and Hartley's, Quesnay's and Helvetius hankering after Newtonian laws in society had been merely metaphorical. .... To Christian thought also the chasm between man and beast was constitutive, ... Hobbes had argued for the need for a despot because men were *like* beasts, Townsend argued instead that they were *actually* beasts and that, precisely for this reason, only a minimum of government was required. From this novel point of view, a free society could be regarded as consisting of two races: property owners and laborers. The number of the latter was limited by the amount of food, and as long as property was safe, hunger would drive them to work. No magistrates were necessary, for hunger was a better disciplinarian than the magistrate.

... The new foundations closely fitted the new society that was developing, ... Economic society had emerged as distinct from the political state. (Polanyi, 1944, pp. 112-115)

Polanyi claims that the naturalist turn of Malthus and Ricardo was a result of a lacking ability to disentangle the working of a capitalist economic system and of Speenhamland that together established a capitalist system without a labour market.<sup>175</sup>

---

<sup>174</sup> See also the section *Reductionism*, in chapter 2.

<sup>175</sup>Polanyi writes; "If ever the overwhelming evidence of the facts seemed to point in one direction, it was, therefore in the case of the iron law of wages, ... This semblance was, of course, not only misleading but indeed implied an absurdity from the point of view of any consistent theory of prices and incomes under capitalism. Yet, in the last analysis, it was on account of this false appearance that the law of wages could not be based on any rational rule of human behavior, but had to be deduced from the naturalistic facts of the fertility of man and soil, as they were presented to the world by Malthus' law of population combined with the law of diminishing returns. The naturalistic element in the foundations of orthodox economics was the outcome of the conditions primarily created by Speenhamland." (Polanyi, 1944, p. 124 )

It follows that neither Ricardo nor Malthus understood the working of the capitalist system. Not until a century after the publication of the *Wealth of Nations* was it clearly realized that under a market system the factors of production shared in the product, and as produce increased, their absolute share was bound to rise.<sup>176</sup> ... (Polanyi, 1944, p. 124)

Polanyi argues that the reductionism of Malthus and Ricardo put human laws under the dictates of 'nature' and the law of the jungle, and had far reaching consequences for economic theory,

... the *deus ex machina* of animal and plant propagation had to be invoked in a scientific system the authors of which claimed to deduce the laws of production and distribution from the behavior not of plants or of animals but of men.<sup>177</sup> ...

... the solution hit upon by the classical economists had the most far-reaching consequences for the understanding of the nature of economic theory. As gradually the laws governing a market economy were apprehended, these laws were put under the authority of Nature herself. The law of diminishing returns was a law of plant physiology. The Malthusian law of population reflected the relationship between the fertility of man and that of the soil. In both cases the forces at play were the forces of Nature, ... The laws of a competitive society were put under the sanction of the jungle. (Polanyi, 1944, pp. 123-125)

The naturalism that Malthus and Ricardo thereby established came to dominate human sciences in the 19<sup>th</sup> Century,

The true significance of the tormenting problem of poverty now stood revealed: economic society was subjected to laws which were *not* human laws. The rift between Adam Smith and Townsend had broadened into a chasm, a dichotomy appeared which marked the birth of nineteenth century consciousness. From this time onward naturalism haunted the science of man, and the reintegration of society into the human world became the persis-

---

<sup>176</sup>Cannan, E., *A Review of Economic Theory*, 1930. Polanyi goes on such; "Although Adam Smith had followed Locke's false start on the labor origins of value, his sense of realism saved him from being consistent. Hence he had confused views.... ... Smith's own view was that universal plenty could not help percolate down to the people, ... Unfortunately, the facts did not seem to bear him out for a long time to come; and as theorists had to account for the facts, Ricardo proceeded to argue that the more society advanced the greater would be the difficulties of procuring food and the richer would landlords grow, exploiting both capitalist and worker..." (Polanyi's note)

<sup>177</sup>Polanyi continues: "Let us briefly survey the consequences of the fact that the foundations of economic theory were laid down during the Speenhamland period, which made appear as a competitive market economy what actually was capitalism without a labor market. First, the economic theory of the classical economists was essentially confused. ... Secondly, given the conditions under which the problem represented itself, no other solution was possible. ... Third,..." (Polanyi, 1944, p. 125)

tently sought aim of the evolution of social thought.<sup>178</sup> (Polanyi, 1944, p. 127)

According to Polanyi, Malthus' theories reinforced Smith's arguments against commercial regulations. The naturalism of Malthus and Ricardo which implied that there ought to be no artificial regulation of competition united theoreticians, who on other matters stood far apart, into a forceful movement for radical liberalism in economic matters,

Since economics established as a natural science the expansion of the self-regulating market that was believed to be an ineluctable necessity, the Poor Law also had to disappear.

It was on this point that Townsend, Malthus, Ricardo, Bentham and Burke were at one. Fiercely as they differed in method and outlook, they agreed on opposition to the principles of political economy and to Speenhamland. What made economic liberalism an irresistible force was this congruence of opinion.... (Polanyi, 1944, p. 127)

### **3.45 Reductionism and consequences – a contrast**

For the sake of gaining a wider perspective of the consequences of List's Idealist (and Realist) system, one is well served by investigating the opposed British 'materialist' and 'biological' schools and their consequences. Referring to the consequences of a materialistic view of Man, life and society, as opposed to List's view, serves a contrasting and illuminating purpose.

These "materialist" and "biological" schools had the same philosophical origins as the English Classical School, a Materialist worldview with a reductionist Image of Man as eudemonic and egotistical. They in principle came to be the originators of a "science" of white racial superiority and the "science" of Eugenics, in the service of Imperial Expansion. This

---

<sup>178</sup> Polanyi continues; "Marxian economics - in this line of argument - was an essentially unsuccessful attempt to achieve that aim, a failure due to Marx' too close adherence to Ricardo and the traditions of liberal economics. The classical economists themselves were far from unconscious of such a need. Malthus and Ricardo were in no way indifferent to the fate of the poor but their human concern merely forced a false theory into even more tortuous paths. ...

Within Ricardo's system itself the naturalistic and the humanistic forces coexisted which were contending for supremacy in economic society. The dynamics of this situation was of overwhelming power. As its result the drive for a competitive market acquired the irresistible impetus of a process of Nature. For the self-regulating market was now believed to follow from the inexorable laws of Nature, and the unshackling of the market to be an ineluctable necessity. ... What made economic liberalism an irresistible force was this congruence of opinion between diametrically opposed outlooks; for what the ultrareformer Bentham and the ultratraditionalist Burke equally approved of automatically took on the character of self-evidence." (Polanyi, 1944, pp. 123-125)

was a consequence of a materialistic point of departure, and opposed to List's Idealist outlook and his strategy of the *Harmony of Interests*.

The background was established historically by Materialist and Nominalist thinkers like Hobbes and Locke, but the immediate originators were Charles Darwin and his book *The Origin of Species*, with the less known subtitle *Preservation of Favoured Races in the Struggle for Life* (Darwin, 1859), and his cousin Francis Galton, who founded *British Eugenics Society*.

It was the Liberal philosopher Herbert Spencer who coined the modern term *Survival of the Fittest*, (although the concept is as old as Empedocles, Cf. Windelband, 1893, p. 53), and also wrote a classificatory book on races, hierarchically organised (Spencer, 1864). Galton argued for a "Jihad" for Eugenics as a new religion, but believed in Lamarckian biology (the ability to inherit experience) (Galton, 1869).

Subsequent political events fuelled these ideas and Social Darwinism, in a way that illustrates how the development of philosophy, science and politics are intertwined.<sup>179</sup>

### 3.46 Empirical evidence

The combination of population growth and the wealth created the past centuries shows that Malthus' expectations have not been confirmed. In the post-WWII era, Malthus' warnings have been repeated in various shapes and versions of which the last is the argument of pollution.<sup>180</sup>

In his *The History of the World Population*, Carlo M. Cipolla looks towards the future as Malthus did, and writes in the same pessimistic spirit,

As world population grows, difficulties seem to grow more than proportionately. ... Even if one resists the distressing thought that it is already too late, one can hardly avoid the unpleasant feeling that all we can foresee in the near future is a worsening of the general situation. In order to improve their miserable standards of living, the underdeveloped and developing countries must undergo the Industrial Revolution. If they fail, they are condemned to abject misery. If they succeed, they will add greatly to the problems of pollution and depletion plaguing our planet today. (Cipolla, 1978, pp. 121-29)

Nevertheless, the trend in population growth is falling. Population growth has been halved from 1962 to 2009 (from 2.20 to 1.13 %) and the population of major developed countries is shrinking, such as Ger-

---

<sup>179</sup> See e.g. the section, *British policy after List*, in chapter 7.

<sup>180</sup> For example, the "climate-crisis" argument is more than 100 years old but has for some reason been picked up again. See e.g. *Ecological Economics: Energy, Environment, and Society* by Juan Alier-Martinez and Klaus Schlupmann, 1987, in the chapter on Frederick Soddy.

many, Italy, Russia, and Japan. With increased industrialisation, this gives reason to expect population growth to keep falling.

Furthermore, Cipolla's argument has a hidden underlying premise: In the future, there will be no technological development that discovers new resources, or new ways to use old resources more efficiently. This was precisely the premise that List repeatedly attacked as an illusion and contrary to empirical facts.<sup>181</sup>

Admittedly, there are many serious problems that support Cipolla's argument, but there is no turning back, since without scientific and technical improvement a country and the world are certain to run out of resources. The trick is to channel development into more advanced science, technology and culture and not into 'mindless consumerism'.

Many empirical facts speak in favour of List's optimism. Many kinds of pollution have decreased, new resources are constantly developed, and new technologies increase output of known resources such as in agricultural biotechnology – using combinations of e.g. bio-chemistry, bacteriology, genetics, stem cell technology, and nanotechnology. Researchers speak of coming "green revolutions" in food production. And interestingly, newly developed- and developing countries like Taiwan, South Korea and Brazil are at the forefront of this research,

... Some of the most successful food producers over the past 20 years have been the BRIC countries (Brazil, Russia, India and China). ...

The BRICs' influence on food markets will rise as Europe's declines. ('A prospect of plenty', *The Economist*, 2011)

Also concerning the main input in farming, energy, new technologies are opening immense opportunities, such as nuclear Thorium,<sup>182</sup> where developing nations like India and China are leading the research.

The lacking development of Thorium power is but one illustration of a more general international problem with new technologies: What seems to be a major problem, is not lacking realistic technical possibilities, but rather a lack of co-ordinated efforts in policies of research- and economics, struggling against vested interests in the old technologies, like uranium based nuclear power - or old transport forms, such as cars and railroads.<sup>183</sup>

---

<sup>181</sup> Cf. the quotation above, in the section *Critic of Malthus' materialism*; List, 1841a, pp. 128-129.

<sup>182</sup> Cf. e.g. the article in *Forbes*, 'Is Thorium the Biggest Energy Breakthrough Since Fire? – Possibly' (Pentland, 2011) and BBC World's '*Cleaner Energy*', on *Horizons* - a weekly program on innovative technology (BBC World, 2012), this time discussing solar- and Thorium power only.

<sup>183</sup> Cf. e.g. *Forbes*' article, 'The Thing About Thorium: Why The Better Nuclear Fuel May Not Get A Chance' (Katusa, 2012); and the article, *High Speed Rail is Old-Fashioned*, promoting automated transport (Daastøl, 2007).



### **3.47 Science, technology, – and politics, define resources**

Although Malthus' theories have been refuted empirically, they resurface in ways that are easily discovered. The UNESCO researcher Henry Teune comments the 1972 Club of Rome report by stating that it repeated the empirically void theories of Malthus, and argues that "Technology ... always defines resources",

The conclusion was Malthus again, whose ideas about growth limiting growth -a clear dialectical principle- had been for so long devoid of empirical confirmation. ...

The main question addressed by these models of growth is as much feared by modern political leaders as the one about life after death by theologians. Can the economic growth of the past two centuries be continued indefinitely? There are two major unknowns in "theories" of economic growth: What will be the new technology and what will people do? ...

All growth is potentially destabilising ... Any compound growth in a niche will eventually destabilize it. And that is the insight of Malthus and others ... but it is not a general one because relationships within nearly all social systems change. ... If one interpretation of the "law" of entropy is accepted, that is, it is merely a function of time, all systems will disintegrate or wear down and eventually collapse ... then there must be some kind of growth in the strength of structures to compensate for this tendency. With no growth all systems will eventually disappear. ... Thus for social systems there must be qualitative structural growth, or a necessary for survival, continuous "integrative" function. ... All systems are subject to entropy, ... Growth is one way of compensating for entropy. ... The most obvious entropy-decay function is the physical ecology of modern societies. The infrastructure needs to be rebuilt on a continuing basis just to stay even, ... All growth, whether biological or social requires know-how: ... A characteristic of human societies is that they can innovate. ... Technological advances also change the nature of resources. Technology ... always defines resources. (Teune, 1988, pp. 64-78)

To counter entropy a society needs so-called "negentropy of the human mind" materialised in new and more efficient technology - both material and immaterial.

Growth of the population and the living standard may be required if mankind is to survive: Let us shortly reflect upon some simple natural and socio-economic characteristics. If a society stagnates at one technological level, the resources, upon which this society is built, are bound to peter out and end this society. The obvious solution -if one holds that human survival is positively valued- is, as Teune pointed out, to make technology more able to define and utilise new resources through innovation.

Innovation, however, requires in this perspective four things, education focused on innovation; increased living age; increased proportion of the population engaged in innovation, and investment:

First, innovation must be advanced by a general education system geared at creating scientific discoveries. This first and most important

relation requires a general uprising in the rational culture of societies including morality and art.

Secondly, the working force must in an increasingly degree be able to work at a higher age level since the technological complexity requires longer education. This requires that the quality of the living standard be raised.

Thirdly, an increasing part of the population must be directly engaged in innovation, as it gets increasingly complex. This requires that the population becomes more efficient which again requires a higher population density, eventually substituted by more efficient infrastructure.

Fourthly, innovation also requires investment, which requires profitable investment opportunities - a complex requirement by itself. The alternative to growth therefore cannot be a zero-growth society, as this will collapse since resources will eventually run out. A zero-growth society will not be willing or able to make the ever-increasing investments necessary to continue the needed innovation. On the other hand, the character of 'growth' is an open issue.

To summarise, a sustainable society requires investments and 'growth', continuous innovation and therefore qualitatively better infrastructure, -higher living standards and -culture. And as Friedrich List so succinctly ended his major opus in 1841, "... all that is required of the Governments ... is – ENERGY." (List, 1841a, p. 435), meaning that political will is needed to proceed in this direction.

## 4.0 Productive force

### Contents

4.01 Summary	179
4.02 Religion, science and education	181
a) List on religion	181
b) Religion and education: The Reformation	183
c) Religion and science: The Renaissance	184
4.03 Science as elevator of civilisation	184
4.04 Education and power	188
4.05 Education as immaterial bedrock of economics	189
4.06 High productivity has many sources	194
4.07 The primary sources of productivity are immaterial	195
4.08 Immaterial forces as basis for entrepreneurship	197
4.09 Immaterial forces as basis for entrepreneurship	199
4.10 Capital of mind	201
4.11 Accumulated capital of mind	205
4.12 Human Capital	207
4.13 Knowledge and information economics	210
4.14 List's predecessors - Conservatism and Romanticism	211
4.15 Comments on List's approach to Capital of Mind	213
4.16 The Historical School on Capital of Mind	218
4.17 Marx's orthodoxy – algebra of exchange value	222
4.18 The Austrian School – Mises on the human mind and Capital	224
4.19 Growth theory – thought as the lacking source	227
4.20 National innovation systems - based on mental capital	232
4.21 Confederation of Labour	239
4.22 Mental side of transportation	244
4.23 Urbanisation furthers communication, innovation and freedom	246
4.24 Networking and Social Capital	249
4.25 Perfecting the balanced harmony of productive powers	250
4.26 Communication furthers urbanisation; wealth and culture	252
4.27 Competition promotes innovation	256
4.28 Communication furthers innovation - and vice versa	257
4.29 Freedom promotes innovation, communication and efficiency	260
4.30 Industrialisation fosters freedom and a humane civilisation	261
4.31 Social well-being improves economic efficiency	265
4.32 Efficiency and value of resources	270
4.33 Production of energy and machines	271
4.34 Productive public credit in a sound credit system	272

#### 4.01 Summary

Mental capital, innovation, and collaboration

There is a moral foundation and a moral commitment to progress, spiritually and materially in List's writing and system. He considered individual spiritual freedom to be both the ultimate good, and at the same time the great mover of economic progress. List emphasised education as the bedrock of an industrial society, and emphasised how an industrial nation was able to utilise science in an immensely higher degree than agricultural nation.

List's concept of 'mental capital' is even broader and deeper in that he includes many cultural and historical factors that the 'human capital' tradition omits. List points to collective phenomena such as communication and the collaborating network of companies etc. – the confederation of labour, what later has been termed the National System of Innovation – and as List pointed out, it included both consumption- and production related activities.

In Western academia, formal studies in the 1950s and 1960s showed that almost 90 % of growth per capita resulted from 'rest' factors other than an increased capital to labour ratio, or capital accumulation. The 'rest' factors, often known as the *Solow residual*, was denominated as 'technical progress'. The search for the source and content of 'technical improvement' gradually led to the broadly accepted view that human capital is responsible for most of the 'technical improvement'.

List argues that 'mental capital' also had 'collective' and historical dimensions – 'materialised' in the formal and informal behaviour and -institutions that together constitute a nation's culture. This was also argued by the Conservative- and Romantic traditions, as well as by the contemporary Historical School of Jurisprudence and by the later Ethical-Historical School of Economics, who sometimes termed themselves 'Realists'.

According to List, the primary role of transport was immaterial and to spread information and culture, and thereby contribute to innovation and elevate civilisation. List argues that only an industrial nation was able to release the huge potential of agriculture and natural resources. Industry also made possible the use of innovative new methods of communication, which allowed for larger markets and economy of scale in production.

Furthermore, industry allowed a higher degree of urbanisation, both real and virtual (through better communication), which through a symbiosis increased innovation. This led to further differentiation of production and consumption that released more creativity, in a virtuous circle. Thereby, industry was the centre of a new type of economic system that increased the pace of production tremendously.

Crucially, he claimed that there were also important cultural effects of industry, since it demanded disciplined, skilled and educated labour and therefore led to general elevation of popular knowledge. Improved communications and larger markets led to equalisation of institutionalised standards across former boundaries, such as physical measurements like weight, distance, time, etc., but also in institutions like money, credit, law and regulations. List argues for the State's duty to improve these institutions.

Development should be balanced between all sectors and thereby contribute to multifaceted inspiration for innovation, consumption and production.

List argues for the State's duty to promote pivotal branches and institutions, such as the normally assumed tasks of administration, jurisprudence, security but also education, science, infrastructure and the machine tool industry. List suggested the use of many practical tools that had been used traditionally in the State Mercantilist and Cameralist traditions, such as temporary monopolies such as patents, preferential interest rates, and State purchase of stocks in new establishments, thereby financing their start up. The tools were direct and administrative but in particular indirect through the legal apparatus, which had a particular role in removing obstacles to an efficient economy.

## **4.02 Religion, science and education**

### **a) List on religion**

List often mentions the positive social- and economic effects of religion<sup>184</sup> and morality.<sup>185</sup> Being a German, the religion he had in mind obviously was the Christian religion. List repeatedly mentions how “enlightened” and tolerant religion has contributed to general advance and progress, regarding numerous nations and in particular Switzerland (Cf. List, 1837a, p. 106), England (Cf. List, 1837a, p. 136; List, 1841a, p. 49, 56) and the USA,

The Christian religion, ... are rich sources of productive power. (List, 1841a, p. 49)

Simultaneously, List is very explicit on the need for toleration and religious freedom.<sup>186</sup>

The spirit of enterprise, industry, and commerce can only strike root in the soil of religious and political liberty; gold and silver will only abide where industry knows how to attract and employ them. (List, 1841a, p. 59)

He argues that despotism, whether religious or political, is no asset economically speaking, and will prevent industrialisation,

With the best intentions in the world one may try to introduce industry and attract - and keep - bullion but all the efforts in this direction will be of no

---

<sup>184</sup> See e.g. List, 1837a, p. 44; and List, 1841a, p. 49, 56, 81, 137, 139, 143, 159, 175, .

<sup>185</sup> See e.g. List, 1837a, p. 44; and List, 1841a, pp. 137, 143, 159, 175, and 259-260.

<sup>186</sup> See e.g. List, 1837a, p. 106, 136, 164; and List, 1841a, p. 11, 59, 139, 159, 208, 322, 414, 416.

avail and will have no permanent success in a country oppressed by political and religious despotism. (List, 1837a, p. 164)

List argues that religious fanaticism and bigotry was a disaster for e.g. Spain and France who by their governments' intolerance therefore lost many of their most talented citizens to forced emigration. In addition, since the refugees immigrated into competitive nations, mainly the Netherlands and England, Spain and France lost doubly so in the international power race. In the case of Spain, List mentions the expulsion of Jews and Arabs, and the lack of a Reformation,

The expulsion of the jews and the arabs cost Spain many useful citizens and a great deal of capital. (List, 1837a, p. 164)

... if, in a word, Spain had politically developed herself in consequence of a Reformation, as England did ... (List, 1841a, p. 322)

In the case of France, List mentions the expulsion of Protestants

The religious persecutions began in Colbert's lifetime. They put an end to any hope of attracting foreign capital and skilled artisans to France. They put an end to any confidence in the permanence of Colbert's reforms. (List, 1837a, p. 136)

In the case of Austria, List mentions the expulsion of Protestants,

Austria had formerly suffered enormously from the banishment of the Protestants, her most industrious citizens; ... (List, 1841a, p.82)

A more specific argument regarding the reasons for the positive economic effects of religion and morality is lacking with List. His most explicit arguments are not well founded,

There is no better proof for the Divine origin of the Christian religion than that its doctrines and promises are in perfect agreement with the demands of both the material and spiritual well-being of the human race. (List, 1841a, p. 123fn)

Or,

To be convinced of this, we need only compare the condition of the European states with that of the Asiatic ones. (List, 1841a, p. 139)

The truth of this was seemingly seen as self-evident and an argument for this was seemingly seen as superfluous. His whole argument may therefore be understood as somewhat doctrinaire but also as implicit; that morality and religion contributes to diligence, perfection, and honesty: Respect for quality work (work ethic), -its fruits (property), and -business contracts.

Nor did List, explain why e.g. Protestantism was more beneficial economically speaking. In any case, these themes were elaborated upon by Max Weber in particular (Cf. Weber, 1920).

b) Religion and education: The Reformation

... England alone has been able, over the centuries, to use to her own advantage nearly all the fruits of the Reformation, ... (List, 1837a, p. 136)

During the Renaissance, the view gained force that promotion of general education is essential; adding force to the argument that an increased population adds to national wealth. The religious Reformation and the increasing influence of Protestantism that took place during the Renaissance from the sixteenth century dramatically increased the literacy of the population.<sup>187</sup> R. A. Houston supports this view in his *Literacy in Early Modern Europe: Culture and Education, 1500-1800*,

One of the great themes which runs through historical writing on education is that Protestantism and schooling are connected. Luther, Calvin and the other revolutionaries who broke the mould of medieval Christendom after 1517 shared the belief that the Bible was the sole source of truth and that each individual Christian should have access to the Word of God through the Scriptures. Luther changed his views on education during the 1520s. ... However, for many reformers the way to a godly life and indeed salvation itself was by reading. Protestant communities would therefore be more likely to wish to educate their children than traditional Catholic ones, and would create schools to do so. A correlation would therefore exist between the confessional leanings of a region, country or community and the availability of schooling.

There is a considerable measure of truth in this argument. The advent of the Reformed faith had a direct (if delayed) impact on the expansion of education in Protestant countries such as Scotland and Sweden; the influence of the Pietists coupled with state action catapulted Prussian society into mass literacy during the eighteenth century; and in regions where Catholics and Protestants were in competition for the hearts and minds of the people, the dynamism of Protestant educational provision enervated Catholic schooling. (Houston, 1988, p. 35)

By increasing literacy, education and freedom of thought, Protestantism may thus be said to have “dramatically” contributed to democratise society in the longer term.<sup>188</sup> Increased literacy, education and freedom of thought, naturally also contributed to scientific progress.<sup>189</sup>

---

<sup>187</sup> Not forgetting, of course, the technical advances that facilitated this; Gutenberg’s ‘Chinese’ printing press. For more discussions regarding the role of Protestantism, see also the section, *Perfecting the State*, in chapter 5.

<sup>188</sup> The Russian Atheist and Anarchist Mikhail Aleksandrovich Bakunin thus argues that Protestantism liberated large parts of Europe but not France, “It is a thousand times right to say that Protestantism, not as a Calvinist theology but as an energetic and armed protest, represented revolt, liberty, humanity, the destruction of the State; while Catholicism was public order, au-

### c) Religion and science: The Renaissance

At the core of the 'European Miracle' of progress in science, culture and economics is religious reform. This began with a philosophical and spiritual change of attitude during the late Medieval Age and early Renaissance. It was a re-orientation from rather doctrinaire Aristotelian Scholasticism, towards an empirically oriented Aristotelianism, and even more so towards an empirically oriented and pantheistic Neo-Platonism.<sup>190</sup> More specifically, what took place was a reform of religion in a liberating direction, enabling a questioning of old doctrines and promoting empirical explorations of the real world, e.g. by telescope, microscope and ship. The Reformation was only one side of this fundamental and revolutionary movement.<sup>191</sup>

### 4.03 Science as elevator of civilisation

Friedrich List explains how industry and science mutually promote each other and how they give opportunities for social and spiritual elevation for the working population, and with a fair material reward, which did not exist in the agrarian society,

---

thority, divine law, the mutual salvation of the Church and the State, the condemnation of human society to protracted slavery. ... the victory of Catholicism in France in the sixteenth and seventeenth centuries was a great misfortune for the entire human race. ... Once a people loses the inclination for liberty, it necessarily becomes, not only in its external conditions but in the very essence of its own being, a people of slaves. It was because Protestantism was defeated in France that the French people lost, or perhaps never acquired, the habit of liberty. It is because this habit is wanting ... that all the revolutions it has made up till now have failed to achieve its political liberty" (Bakunin, 1872, p. 313)

<sup>189</sup> Mikhail Bakunin in his *God and the State*, thus expresses a true Protestant sentiment when he argues, "If I bow before the authority of the specialists ... I bow before the authority of special men because it is imposed on me by my own reason." (Bakunin, 1871, p. 229)

The difference to Protestantism is of course that Bakunin rejected the Bible as an authority, and thus was a more consistent "Protestant".

<sup>190</sup> Interestingly, the differences between doctrinaire Scholasticism and Renaissance empiricism is paralleled around the time of the Methodenstreit in economics, the opposition between the rationalist English Classical School and the empiricist Historical School (in an Idealistic fashion, as during the Renaissance).

<sup>191</sup> Reinert and Daastol elaborate along these lines in their article *Exploring the Genesis of Economic Innovations: The religious gestalt-switch and the duty to invent as pre-conditions for economic growth*. Cf. Reinert and Daastol, 1998, pp. 136-137.



The greater the advance in scientific knowledge, the more numerous will be the new inventions which save labour and raw materials and lead to the discovery of new products and processes. As those engaged in industry become more familiar with the advances made in scientific knowledge the more quickly - and the more successfully - will new discoveries and inventions be applied to industry in a practical way. (List, 1837a, p. 67)<sup>192</sup>

In addition to literary studies, List advises rule of law, travel and free and direct communication especially with those of other trades, and thereby gives us a reason why the closeness in towns is productive,

Anyone engaged in industrial pursuits should appreciate that success will depend upon his knowledge of science and upon the new discoveries that are the result of scientific progress. If he does not already possess certain qualities he should develop the art of independent thought and the ability to make decisions. A man acquires intellectual qualities and imagination not only from schoolmasters and books but by travelling and by associating with those who have ambitions similar to his own. He should be in touch not only with men who are in the same line of business as himself but he should also associate with those engaged in various other aspects of the world of business and also with men who devote their talents to public affairs. A man with this sort of training and experience will soon realise that if he is to succeed in business and gain a fair reward for his work he will need as firm guarantees as possible for his personal safety and for the security of his property. His experiences of life - and an appreciation of the nature of his own interests - should lead him to support the abolition of anything that restricts his freedom and the prosperity of his enterprises. He should support the establishment of national institutions that will ensure his freedom and increase his prosperity. (List, 1837a, pp. 67-68, see also p. 64, 69, and 79)

List argues that industry gives greater opportunities for scientific progress. He praises the cultural effects of industrialisation, as opposed to effects from agriculture, and how industrialisation promotes freedom, enterprise, innovation, and more efficient use of resources,

... the productive powers of industry awaken in industry and agriculture the spirit of enterprise and innovation.  
... industry ... stimulates the improvement of communications, ...

Agriculture gives little scope for the abilities of skilled and useful, workers. Factories, on the other hand, do give them the opportunity to use their skill so that their productive powers are multiplied by 10 or even by 100. Consequently an industrialised society will gain immeasurably more from new inventions and from scientific progress than is possible for an agrarian society. (List, 1837a, p. 68)<sup>193</sup>

---

<sup>192</sup> This quotation is also used elsewhere in this chapter, under *Efficiency and value of resources* ...

<sup>193</sup> These quotations are also used elsewhere in this chapter, under *Industrialisation fosters...*

Today, we may argue that agriculture has changed a lot and that it often embodies so much knowledge and combined skills that it often may offer the individual a more varied life if not as specialised as the industry based life might do. However, even in his days, List argues for the introduction of science in agriculture, as for instance in breeding. List claims that a manufacturing industry is the precondition for a modernisation of agriculture and that science and arts will blossom in a manufacturing state,

Manufactures are at once the offspring, and at the same time the supporters and the nurses, of science and the arts. We may observe how little the condition of raw agriculture puts sciences and arts into requisition, how little of either is necessary to prepare the rude implements which it employs. It is true that agriculture at first had, by yielding rents of land, made it possible for men to devote themselves to science and art; but without manufactures they have always remained private treasures, and have only extended their beneficial effects in a very slight degree to the masses. In the manufacturing State the industry of the masses is enlightened by science, and the sciences and arts are supported by the industry of the masses. There scarcely exists a manufacturing business which has not relations to physics, mechanics, chemistry, mathematics, or to the art of design, etc. No progress, no new discoveries and inventions, can be made in these sciences by which a hundred industries and processes could not be improved or altered. In the manufacturing State, therefore, sciences and arts must necessarily become popular. (List, 1841a, ch. 17, p. 200)

Science and industry has produced machinery, which tenfold outweighs the use of slavery, and the manufacturing nation has a hundredfold more opportunities of applying machinery than the agricultural nation,

The sciences and industry in combination have produced that great material power which in the new state of society has replaced with tenfold benefits the slave labour of ancient times, and which is destined to exercise on the condition of the masses, on the civilisation of barbarous countries, on the peopling of uninhabited lands, and on the power of the nations of primitive culture, such an immeasurable influence-namely, the power of machinery.

A manufacturing nation has a hundred times more opportunities of applying the power of machinery than an agricultural nation. A cripple can accomplish by directing a steam engine a hundred times more than the strongest man can with his mere hand. (List, 1841a, ch. 17, p. 200)

List often uses England as a model, also regarding science and the arts,

It is true that for this increase in her power, and in her productive capacity, England is not indebted solely to her commercial restrictions, her Navigation Laws, or her commercial treaties, but in a large measure also to her conquests in science and in the arts. (List, 1841a, p 48)

List regarded education and research, as crucial parts of the productive forces. List writes that historically, the huge sacrifices of “exchange value” to improve knowledge “have ultimately been rewarded by an immense increase in their prosperity and productive power”,

The owner of a large estate will sacrifice significant "exchange value" if he decides that his son should not work on his farms to increase their output but should travel abroad to study new farming methods and to bring home new plants, seeds and improved livestock. Here the immediate loss is balanced by an improvement in the productive power achieved by later generations rather than by the landowner himself.

While Watt and Arkwright were inventing new machines and improving them there was a loss of "exchange value" but eventually these pioneers enormously increased the productive power not only of England but of the whole world. Most inventors and those who advance technical knowledge sacrifice their savings but the national economy is immensely strengthened. Countries, such as the United States of America, have suffered huge economic losses to achieve political independence but their sacrifices have ultimately been rewarded by an immense increase in their prosperity and productive power. (List, 1837a, p. 35)

In the *National System* List delivers a hard blow against technology pessimists like Malthus, claiming that their narrow-mindedness neglect the possibilities in inventions, promote egotism, and a destruction of wealth and civilisation,

It is not true that population increases in a larger proportion than production of the means of subsistence ... It is mere narrow-mindedness to consider the present extent of the productive forces as the test of how many persons could be supported on a given area of land. ... Who will venture to set further limits to the discoveries, inventions, and improvements of the human race? ... ? If Malthus' doctrine appears to us in its tendency narrow-minded, it is also in the methods by which it could act an unnatural one, which destroys morality and power, and is simply horrible. (List, 1841a, pp. 128-129)<sup>194</sup>

History has proven List right on his technology optimism and we may only mention a few achievements such as agricultural genetics, biotech, the Green Revolution, with examples like the miraculous transformation of the vast savannah-like Cerrado steps in Brazil into a food producing giant. (Cf. e.g. “The miracle of the cerrado”, *The Economist*, 2010 and *The Economist*, 2010)

From the above, it is clear that List was a fond believer in the possibilities of science. If we now combine this with what List said about the interconnectedness of all trades and occupations in a national confederation of Labour, then we have the core of a theory of national innova-

---

<sup>194</sup> For a larger quotation see the section, *Critic of Malthus' materialism*, in chapter 3.

tion systems as Chris Freeman et al pointed out (Freeman, 1982-2003, and 1987).

List's fascination with railways, internet (the telegraph), steam locomotives, and then electromagnetic propulsion was not alone due to the importance of communications and their market forging capabilities.

An equally important factor was the innovative aspect - that this represented a revolutionary new technology that would promote economic efficiency throughout the economy, as with the machine tool industry, and in fact also decades of accomplishments by NASA (Cf. *The Railroad and the Space Program. An Exploration in Historical Analogy*, Mazlish, 1965).

#### 4.04 Education and power

After the end of the Thirty Years War in 1648, and the establishment of the Western European competitive state system, the national elites gradually became aware that an educated population had significant advantages, technologically, economically and militarily. Prussia was to lead the way in the eighteenth Century. John C Caldwell writes,

In Prussia, Frederick the Great instituted compulsory schooling in 1763. While the schooling was not good, it had sufficient impact to stir the rest of Europe, especially after the Franco-Prussian War and was a much-quoted precedent in the struggle for universal schooling (Caldwell, 1980, p. 233).

Thereafter, compulsory education became a *raison d'état* for nations that aspired to a place in the Sun. The following is a profound explanation of why education is important, written in the spirit of Friedrich List, by Professor Louis Wolowski, in his introductory Preliminary Essay to the American translation of Wilhelm Roscher's *Principles of Political Economy* (Roscher, 1878). Wolowski translated Roscher's work to French in 1856,

Man is an intelligent being, ... Man was created in the image of God, ... *Labor* is nothing but the action of spirit on itself and on matter.<sup>195</sup> ...

Wealth, then, is treated only as one of the forces of civilization. Other interests than purely material ones occupy the first place. ... the most fruitful source of material development lies in intellectual development. ... From the moment that it is the mind which *-produces* and which governs the world, intellectual and moral perfection become the cause and effect of material progress. ...

The increase of production, then, appears an instrument of elevation in the moral order.<sup>196</sup> It is energy of soul, intelligence and manly virtue which constitute the chief source of the wealth of nations; ...

Labor is the child of thought. ...

---

<sup>195</sup> 2 *M. Cousin* has brought this out in an admirable manner in his lectures on Adam Smith. *Cours de Philosophie Moderne*. (Wolowski's note)

<sup>196</sup> 1 *Channing*. (Wolowski's note)

Production is, therefore, not a material, but a spiritual, work. How, then, can acts and their morality be separated? How not understand that the market of labor has its own distinct laws, and that education, even from a material stand-point, becomes the highest interest and the most important duty of society, since on it depends the efficiency of labor? (Wolowski, 1877)

#### **4.05 Education as immaterial bedrock of economics**

In his emphasis on education and liberty, List had many German predecessors, such as Johann Gottlieb Fichte. Although Fichte may be one of the most individualistic philosophers, he nevertheless regards Man's true destiny as an unselfish political being. The reason why this seeming contradiction was no contradiction to Fichte was his idealistic point of departure, individualism develops in the spiritual creative process, not in material consumption. This is an idea that later was developed by Rudolf Steiner,<sup>197</sup> who also practiced as a teacher for working class youth and developed a theory of education. In *The Problem of Education in Fichte's Philosophy*, Zoran Dimić explains the core role of education within Fichte's social framework, as a result of Fichte's 'Image of Man' as a being social and political. Therefore, Fichte insisted that scholars had a public duty, as in his *The Vocation of Man* (Cf. Fichte, 1799). Dimić writes,

Fichte's comprehension of Education depends directly upon the way he understands philosophy and philosophising. The Primacy of Practical Reason is quite noticeable in his philosophy. First of all, Fichte is an orator, a teacher, a rhetorician and an educator. The idea of Man stands at the foundations of his entire philosophy and philosophising. The precise definition of Man enables a clear and fundamental definition of Education. According to Fichte, Man is a community being. If he strives to be Man, he must not be selfish and egoistic. The role of Scholar and Educator is of particular importance in this. The essence of each individual indeed lies outside himself, yet not in some kind of abstract metaphysics of ethics. It lies in other people and in the general spirit of the community to which Man is directed if he wants to fulfil himself as a being. Man's destiny is not metaphysics but politics. (Dimic, 2003, p. 777)

List honours liberty and universal education for the success of the Swiss,

Civil and religious liberty and universal education have evoked in the Swiss, activity and a spirit of enterprise ... (List, 1841a, p. 321)

List argues that the necessity of education induces devotion for instruction and writing, and competition in such activities; thereby perfecting science, arts, industries, and agriculture,

---

<sup>197</sup> For a thorough discussion of this issue see Hjalmar Hegge's published dissertation, *Freedom, Individuality, and Society* (Hegge, 1988).

The necessity for education and instruction, through writings and lectures by a number of persons who have to bring into practice the results of scientific investigations, induces men of special talents to devote themselves to instruction and authorship. The competition of such talents, owing to the large demand for their efforts, creates both a division and co-operation of scientific activity, which has a most beneficial influence not merely on the further progress of science itself, but also on the further perfection of the arts and of industries. (List, 1841a, ch. 17, p. 200)<sup>198</sup>

John Heskett argues that List found the deeper causes for long term economic success to lie in ‘capital of mind’, and that skill and competence was the precondition also for a better society, specifically including the instructors,

... In addition to the arguments for temporarily protecting domestic industry, he also began to consider how more long-term objectives could be promoted. He emphasised that it was necessary to understand the ‘deeper lying causes’ that explained how a nation produces economic wealth, in particular the concept of ‘productive powers’, which were essentially constituted by ‘the intellectual and social conditions of individuals, which I call capital of mind’. 5<sup>199</sup>

This prefigured the recent emphasis on human or intellectual capital as the constant factor in explaining innovative competitiveness, rather than the division of labour, which List believed led to divisiveness and a debasement of work. Instead, he advocated skill and competence as the foundation not just of lasting economic achievement, but of a better society. The mental capital of a nation, he also stressed, is generated not only by those who create value in exchange, but also ‘the instructors of youths and of adults, virtuosos, musicians, physicians, judges, and administrators’. 6<sup>200</sup> (Heskett, 2010, p. 5)

It is evident throughout List works that he considers that education has a very considerable- and fundamental role to play in the development of a nation.

In his Philadelphia speech in 1827, List praises French intellect and the French system of education, and the establishment of a higher technical school, a policy that later was to be emulated by Germany and many other nations,

France erected in the time of her revolution, a n a t i o n a l p o l y t e c h s c h o o l, by which a number of individuals, and according to Mr.

---

<sup>198</sup> The first part of this quotation has also been used in then section on education.

<sup>199</sup> [4] List, F., Ingersoll, C. J., Liebig, M. & Larouche, L. H. (1996), *Outlines of American Political Economy in Twelve Letters to Charles J. Ingersoll*, Bottiger, Wiesbaden, p. 63 (Heskett’s note)

<sup>200</sup> [5] List, F. (1966), *The National System of Political Economy*, Augustus M. Kelley, New York, p. 140 (Heskett’s note)

Dupin, not less than four thousand public officers, acquired the necessary knowledge, and ardent spirit of promoting internal industry.

... so France may improve her political institutions by imitating ours, so we may advance our public prosperity, by taking her economical institutions for a model. The great example of France respecting her national polytechnic school, has long ago been imitated by all European governments, ...

If a national literary institute may be an ornament of a nation, highly advanced in literature, arts and sciences, a national polytechnic institute is an urgent necessity of the present stage of our social condition. (List, 1827d)

John Heskett argues that French success in luxury goods was the result of a deliberate policy to promote and educate quality labour,

The promotion of quality work to strengthen French competitive power, a vital element of Colbert's policy during the reign of Louis XIV, was without doubt extremely successful in laying long-term foundations for success. ... The role of France as a leader of taste in Europe was not an accident, and had nothing to do with any innate quality of taste in French culture. Instead, it was the outcome of long-term consistency in political policies, and support for design practice and education in quality manufacturing. (Heskett, 2010, p. 5)

In his 1837 treatise, List calls for education, for the good of developing individual abilities and supplying industry with skilled people. He therefore argues for more books and teachers, in particular within mathematics and the natural sciences,

INDUSTRY is the mother and father of science, literature, the arts, enlightenment, freedom, useful institutions, and national power and independence.

Anyone who wishes to devote himself to industrial activity – to the production of manufactured goods – should learn and understand something of mathematics and the natural sciences. Schoolmasters and books are needed to enable those engaged in industrial pursuits to make progress in these subjects. They are needed to give young people possessing the appropriate natural ability and previous education the opportunity to specialise in mathematics and the natural sciences. (List, 1837a, pp. 66-67)

And in 1841, in his *Natural System*, List advises public fostering of country-wide technical education and competition between the schools,

The government should foster the extension of technical education to the best of its ability. Technical and agricultural schools and colleges should be established not only in the capital of a country but throughout the provinces. The cost of building these schools should be defrayed by the provincial authorities. They should be run under the supervision of provincial chambers of commerce and agriculture and competition between them should be encouraged. The Ministry of Education should exercise only a general oversight over technical and agricultural schools. (List, 1837a, ch. 24, p. 119)

List advises education, as a prerequisite for acquiring skill, and are to be considered as investment into the future,

All expenditure in the instruction of youth, the promotion of justice, defence of nations, &c. is a consumption of present values for the behoof of the productive powers. The greatest portion of the consumption of a nation is used for the education of the future generation, for promotion and nourishment of the future national productive powers. (List, 1841a, p. 139)

List argues that England excelled because their government promoted education,

Before the time of Edward III, the English were the greatest bullies and good-for-nothing characters in Europe; certainly it never occurred to them to compare themselves with the Italians and Belgians or with the Germans in respect to mechanical talent or industrial skill; but since then, their Government has taken their education in hand, and thus they have by degrees made such progress that they can dispute the palm of industrial skill with their instructors. (List, 1841a, pp. 386–387)

List describes how England invited skilled workers from abroad, let them educate England's workers, and carefully nurtured the new skill,

The island kingdom borrowed from every country of the Continent its skill in special branches of industry, and planted them on English soil, under the protection of her customs system. Venice had to yield (amongst other trades in articles of luxury) the art of glass manufacture, while Persia had to give up the art of carpet weaving and dyeing.

Once possessed of any one branch of industry, England bestowed upon it sedulous care and attention, for centuries treating it as a young tree which requires support and care. (List, 1841a, p. 39)

The crucial point in order to understand List's trade policies is that the mental foundations of economics make learning necessary and possible. However, knowledge is a fragile commodity. This necessitates stability-, security- and protection of production.

List explains how a nation's productive power, its immaterial and material force, is the result of a union of generations -of continuous work for generations,

One can see at a glance that, as in all human institutions so also in industry, a law of nature lies at the root of important achievements which has much in common with the natural law of the division of labour and of the confederation of the productive forces, whose principle, namely, consists in the circumstance that several generations following one another have equally united their forces towards the attainment of one and the same object, and have participated in like manner in the exertions needed to attain it. (List, 1841a, p. 295)



A nation's productive power is possible only due to the education of younger generations by the older generations, through religious institutions, professional caste systems and guilds, and later by schools and books. List often refers to this collective learning process as "the industrial education of the nation" (Cf. List, 1841b, *Introduction*, in Hirst, 1909, p. 315).

The necessity of education induces devotion for and a competition in such activity, thereby perfecting science, arts, industries, and agriculture,

The necessity for education and instruction, through writings and lectures by a number of persons who have to bring into practice the results of scientific investigations, induces men of special talents to devote themselves to instruction and authorship. The competition of such talents, owing to the large demand for their efforts, creates both a division and co-operation of scientific activity, which has a most beneficial influence not merely on the further progress of science itself, but also on the further perfection of the arts and of industries. The effects of these improvements are soon afterwards extended even to agriculture. Nowhere can more perfect agricultural machines and implements be found, nowhere is agriculture carried on with so much intelligence, as in countries where industry flourishes. Under the influence of manufactures, agriculture itself is raised to a skilled industry, an art, a science. (List, 1841a, ch. 17, p. 200)<sup>201</sup>

List claims that educators, artists, physicians, judges, and administrators "are productive in a much higher degree" indirectly than those who are producing directly, despite the fact their products often cannot be sold for money,

The errors and contradictions of the prevailing school to which we have drawn attention, can be easily corrected from the standpoint of *the theory of the productive powers*. Certainly those who fatten pigs or prepare pills are productive, but the instructors of youths and of adults, virtuosos, musicians, physicians, judges, and administrators, are productive in a much higher degree. The former *produce values of exchange*, and the latter *productive powers*, some by enabling the future generation to become producers, others by furthering the morality and religious character of the present generation, a third by ennobling and raising the powers of the human mind, a fourth by preserving the productive powers of his patients, a fifth by rendering human rights and justice secure, a sixth by constituting and protecting public security, a seventh by his art and by the enjoyment which it occasions fitting men the better to produce values of exchange. (List, 1841a, pp. 143-144)

The following is a modern confirmation from practical business life, of the importance of education. In the summary of Stefan Bergheim's 2005 report for Deutsche Bank Research, *Human capital is the key to growth, Success Stories and Policies for 2020*, he writes that,

---

<sup>201</sup> This quotation has also been used in this , in the section *Science as elevator ...*

- Our empirical investigation supports the view that human capital is the most important factor of production in today's economies. Increases in human capital are crucial to achieving increases in GDP. The best available proxy for human capital is the average years of education of the population aged 25 to 64. (Bergheim, 2005)

#### **4.06 High productivity has many sources**

In List's general discussion of the causes of wealth, he asks why the English have "hundreds" of times higher productivity than other nations,

It is true that for this increase in her power, and in her productive capacity, England is not indebted solely to her commercial restrictions, her Navigation Laws, or her commercial treaties, but in a large measure also to her conquests in science and in the arts.

But how comes it, that in these days one million of English operatives can perform the work of hundreds of millions? It comes from the great demand for manufactured goods which by her wise and energetic policy she has known how to create in foreign lands, and especially in her colonies; from the wise and powerful protection extended to her home industries; from the great rewards which by means of her patent laws she has offered to every new discovery; and from the extraordinary facilities for her inland transport afforded by public roads, canals, and railways. (List, 1841a, pp. 48-49)

Only culturally mature nations like England are able to carry out important transport projects and have them repay their costs. List's description of England's rapid success reminds us of the more recent and rapid successes by South-Korea, Taiwan and China,

England has shown the world how powerful is the effect of facilities of transport in increasing the powers of production, and thereby increasing the wealth, the population, and the political power of a nation. She has shown us what a free, industrious, and well-governed community can do in this respect within the brief space of half a century, even in the midst of foreign wars. That which the Italian republics had previously accomplished in these respects was mere child's play. It is estimated that as much as a hundred and eighteen millions sterling have been expended in England upon these mighty instruments of the nation's productive power.

England, however, only commenced and carried out these works when her manufacturing power began to grow strong. Since then, it has become evident to all observers that that nation only whose manufacturing power begins to develop itself upon an extensive scale is able to accomplish such works; that only in a nation which develops concurrently its internal manufacturing and agricultural resources will such costly engines of trade repay their cost; and that in such a nation only will they properly fulfil their purpose. (List, 1841a, p. 49)

#### **4.07 The primary sources of productivity are immaterial**

To the question of why the English have “hundreds” of times higher productivity than other nations, he replies by pointing first to her wise policy, -laws, and high morality,

It must be admitted, too, that the enormous producing capacity and the great wealth of England are not the effect solely of national power and individual love of gain. The people's innate love of liberty and of justice, the energy, the religious and moral character of the people, have a share in it. The constitution of the country, its institutions, the wisdom and power of the Government and of the aristocracy, have a share in it. The geographical position, the fortunes of the country, nay, even good luck, have a share in it. (List, 1841a, p. 49)

List argues that workers in an advanced country have much greater output, but only if they are well educated and achieve good knowledge of science and technical skills. Nevertheless, many other conditions must be met regarding morality, security, legal system and the fostering and protection of science and arts. All contributing to harmonious balance between all branches of production,

Nature supplements and increases men's productive powers and output by the power of water, wind, animals, and steam. But men can use these natural powers to establish advanced types of workshops and factories only after they have made the requisite intellectual progress. They must be enlightened and well educated and they should have a good knowledge of science as well as high standards of technical skill. Consequently the workers in an advanced country have a much greater output than workers in a backward country.

It follows that certain conditions must be fulfilled before men's productive powers, and their intellectual and physical labours, can be successfully applied to the production of material goods that have an exchange value. There must be good laws, effectively enforced. Persons and property must enjoy the maximum security. The people must have high moral and religious standards so that superstition, prejudice and vice can be rooted out. There must be a good system of education. Science and the arts must be zealously fostered. Workshops and factories must receive adequate protection. There should be a harmonious balance between all branches of production. In general the whole national economy should be stimulated. The government should safeguard economic prosperity at home and should protect the country from foreign aggressors. Moreover the labours of those who promote the expansion of productive powers are just as productive as those who actually make goods that have an exchange value. (List, 1837a, p. 185)

List denies that prosperity is directly related to the quantitative number of scholars – and indirectly points to the quality of scholars,

Our opponents might argue that the principle we have advanced could be interpreted as meaning that economic prosperity is related to the number of lawyers, parsons, soldiers, teachers, and scholars who are working in a

country. It is easy to refute this sophism. Intellectual production and brainwork - like manual labour and the production of material goods - cannot be measured by counting the numbers of individuals concerned. ... (List, 1837a, p. 185)

List also claimed that Christianity, and even some versions of it, is better suited for development,<sup>202</sup>

Christianity, monogamy, and freedom are more likely to foster the development of productive powers than Mohammedanism, polygamy, and servitude or a very limited amount of freedom. And there are even significant differences between the productive powers of the adherents of various Christian churches. (List, 1837a, p. 184)

Kaevan Gazdar, in his *Germany's Balanced Development: The Real Wealth of a Nation*, points to the influence of List on later German economists such as Weber and Sombart, regarding the deeper cultural foundations of economic progress; "emphasis on the foundations rather than the manifestations of wealth"; "emphasis on insights rather than merely on facts and figures". Moreover, we may we add, emphasis on inner and immaterial relations rather than external and material relations, in other words the contrast between epistemological nominalism versus –realism. Gazdar writes,

Friedrich List, a publicist whose fame derives from his promotion of a customs union that preceded the unification of Germany in the nineteenth century, founded a school of thought that concentrated on the national specificity of wealth creation rather than on universal economic laws. List attacked the materialistic orientation of the classical school, criticizing Adam Smith for his cosmopolitan individualism. "Those who breed pigs are, according to this doctrine, more productive than those who teach human beings," he mockingly commented. By contrast, he recognized that stable wealth depended on education, transport, and other elements of infrastructure, influencing German state policies in this direction.<sup>203</sup>

List's emphasis on the foundations rather than the manifestations of wealth was deepened and refined by social scientists like Max Weber in the early twentieth century. Weber perceived the importance of cultural context and relativized the significance of economic laws. In his famous study *The Protestant Ethic and the Spirit of Capitalism*, Weber demonstrated how religious traditions influenced the rise of capitalism in different western countries.<sup>204</sup>

---

<sup>202</sup> As e.g. Wilhelm Roscher, Max Weber. Werner Sombart and Richard Tawney later elaborated upon (Roscher 1877, Weber 1929, Sombart 1911, Tawney 1926) and Adam Müller etc. before List.

<sup>203</sup> 4: Friedrich List, *Das nationale System der politischen Ökonomie* (Stuttgart: Cotta, 1883), especially pp. 46-49, 136-141; for an Anglo-Saxon assessment of List, see James Fallows, "How the World Works," in *Atlantic Monthly*, December 1993, pp. 61ff. (Gazdar's note)

<sup>204</sup> 5: Ludwig M. Lachmann, *Drei Essays über Max Webers geistiges Vermächtnis* (Tübingen: Mohr, 1973), pp. 2-9, 16-21 (Gazdar's note)

Similarly, Weber's colleague Werner Sombart perceived in his masterpiece, *Modern Capitalism*, that the epoch of high capitalism had ended with the outbreak of the First World War. He recognized the normative nature of what he called "late capitalism": the dislodging of the profit motive as the prime term of reference, the replacement of pure competition through elements of cooperation, and the diminuation of employer-employee antagonism through a complex system of rules and regulations.<sup>205</sup>

Attentive readers of Sombart's works are privy to insights into the true nature of the German economy, insights still relevant to a deeper understanding of the country's wealth. This book aims at the same depth of understanding, the same emphasis on insights rather than merely on facts and figures. (Gazdar, 1998, p. 5)

#### **4.08 Immaterial forces as basis for entrepreneurship**

Although e.g. Malthus mentioned the role of distress and gloom as important economic drivers, many other immaterial factors have been ignored; e.g. in standard economic textbooks. Many immaterial drivers are of a subjective and indeed of a positive nature, and highly essential for economic progress, e.g. optimism; lust for exploration; curiosity and playfulness, perfectionism and personal improvement; communal responsibility and morality; as well as popular engagement.

These are all positive motivating factors and therefore closely related to willpower. In fact, it is not easy to say which is the premise for the other, but all are strongly needed in order to succeed. Therefore, these highly subjective but indeed also collective factors can be said to be part of the productive powers of a nation. These immaterial factors are commonly acknowledged as such in scientific endeavours, in exploration in general, and in business management.

The US based magazine *Business Week* devoted a whole issue to the theme of 'Optimism' after the financial crisis in 2008, and James Gulliver Hancock began the feature article such,

Most human resources managers base their motivational policies on a simple psychological premise: that optimistic, engaged employees are more productive and hence can help their employers grow and make more money. Put simply, workplace optimism, if nurtured properly, can be a competitive advantage. (Hancock, 2009)

And indeed, after the financial crisis in 2008, the difference in the will to make bold initiatives in Asia and the West is startling, as indicated in the headline of this article in *The Economist*: "Asian optimism, European gloom" (*Economist*, 2008).

List argues that the prime mover in economics is will power,

---

<sup>205</sup> 6: Werner Sombart, *Das Wirtschaftsleben im Zeitalter des Hochkapitalismus*, Book 1 (Munich: Duncker & Humblot, 1927), pp. XIIff. (Gazdar's note)

If work produces wealth, what produces work? ... We always find that there is some inner urge which sets the human body in motion. ... (List, 1837a, p. 184)<sup>206</sup>

... all that is required of the Governments can be expressed in one word, and that is – ENERGY. (List, 1841a, p. 435)<sup>207</sup>

Path breakers in history have later emphasized the relevance of will-power needed to succeed. President Kennedy in 1962 pointed to the core of the problem, when arguing that one should choose the harder tasks in order to improve oneself. Donald Gibson, in his *Battling Wall Street. The Kennedy Presidency*, quotes President Kennedy as saying that,

We choose to go to the moon. We choose to go to the moon in this decade, and do the other things, not because they are easy but because they are hard; because that goal will serve to organise and measure the best of our energies and skills; because that challenge is one that we are willing to accept, one that we are unwilling to postpone, and one which we intend to win - and the others too. (Gibson, 1994, p.150)

Similarly, Colbert chose to use a ‘frog-leaping strategy’ to lift the skills of France; by deliberately planning long-term, he promoted production of luxury goods.<sup>208</sup> - And French luxury goods sell extremely well even today, with Asia’s new prospering classes, and even after the crisis of 2008,

China's appetite for high-end Western branded goods is fast becoming insatiable ... China—relatively untouched and still optimistic—remains the most important market for luxury retailers. ...

But there’s another China reality. About half of China's potential shoppers aren't really consumers in this sense at all.... The trickle down of wealth is still waiting to take place. (Chan (2011), *China’s Luxury Goods Boom*)

Such ‘frog-leaping’ strategies; of deliberately choosing the harder tasks in industrial development, are not limited to the space race or production of luxury goods, since the production of jet-planes and helicopters in Indonesia in the 1990s also was a conscious effort in this direction, as is the Taiwan Ministry of Economic Affairs’ recent machine tool strategy of developing ‘model firms’. MOEA's Industrial Development Bureau (IDB) will,

---

<sup>206</sup> For an extended quotation see the section, *Differentiate cause from effect: Mental powers*, in chapter 3.

<sup>207</sup> This little quote has also been used elsewhere in the chapters and sections; (2) *Realist and Idealist Methods*; and (4) *Capital of mind*.

<sup>208</sup> Cf. Heskett, 2010, p. 5; see quotation in the section above; *Education as immaterial bedrock of economics*.

... help developing Taiwan as one of the world's top-three producing and export nation for the products, in 2015. ...[and] develop Taiwan as an Asia-Pacific R&D and design hub for key components for emerging industrial production equipment, ... (Cf. Taiwan Economic News, 2007).

#### 4.09 Immaterial forces as basis for entrepreneurship

Reading and making a summary of Dornbusch and Fischer's textbook *Macroeconomics*, I noticed that the basic argument was that culture, or more specifically human institutions, were often described as an obstacle to growth - so to speak standing in the way of the well-oiled and efficient economic machinery (Dornbusch and Fischer, 1978). But who, indeed, can imagine an economy as external to and independent of culture and institutions?

In contrast, List explains wealth as a result of culture. In his Philadelphia speech in 1827, List explains how France established her wealth through her intellectual powers - and with the aid of institutions, for example the establishment of a polytechnic school,

It was not only the protecting system by which France was enabled to increase so wonderfully her productive power. It was moral riches, which increased her material riches, it was her *i n t e l l e c t u a l* power, which, with the aid of her protecting measures, raised her *i n s t r u m e n t a l* powers.

... industry and knowledge are the causes of individual wealth and public prosperity. (List, 1827d)<sup>209</sup>

List's emphasis on cultural and intangible factors differed from the focus on material matters of English classical economists. The focus on material matters was later subsumed within a pecuniary or monetary framework that could be formalised – as opposed to the intangible factors. The focus on intangible matters also belonged to the Renaissance statecraft and its heir in the Cameralist science, and was very pronounced with a forerunner of List, the German born Adam Müller. List wrote,

Adam Smith regarded the physical labour which produces goods having exchange value as the sole source of goods and he failed to examine the origins that enable this work to be done. From this failure came his serious mistake of ignoring the intellectual resources that lie behind the creation of productive powers. (List, 1837a, 186)

List writes that the Americans understood that civilisation and power is more important than material wealth, and that this translates into a need for industry,

---

<sup>209</sup> See the rest of the quote below, in the section; *Education as immaterial bedrock of economics*.

At length the Americans came to realise the truth that it behoves a great nation not exclusively to set its heart upon the enjoyment of proximate material advantages; that civilisation and power -- more important and desirable possessions than mere material wealth, as Adam Smith himself allows - - can only be secured and retained by the creation of a manufacturing power of its own ... (List, 1841a, p. 102)

On the other hand, List also emphasized the interdependence between mind and matter,

It is not easy to say whether the material forces exert a greater influence over the moral forces, or whether the moral outweigh the material in their operation; whether the social forces act upon the individual forces the more powerfully, or whether the latter upon the former. This much is certain, however, namely, that between the two there subsists an interchanging sequence of action and reaction, with the result that the increase of one set of forces promotes the increase of the other, and that the enfeeblement of the one ever involves the enfeeblement of the other. (List, 1841a, p. 49)

Nevertheless, List points to the crucial importance of mental work,

The more the mental producers succeed ... so much greater will be the production of material Wealth. On the other hand, the more goods that the material producers produce, the more will mental production be capable of being promoted. (List, 1841a, p. 159)<sup>210</sup>

---

<sup>210</sup> Here is an extended quotation: "The whole social state of a nation will be chiefly determined by the principle of the variety and division of occupations and the cooperation of its productive powers. What the pin is in the pin manufactory, that the national well-being is to the large society which we term 'the nation.' The most important division of occupations in the nation is that between the mental and material ones. Both are mutually dependent on one another. The more the mental producers succeed in promoting morality, religion, enlightenment, increase of knowledge, extension of liberty and of perfection of political institutions -- security of persons and property within the State, and the independence and power of the nation externally -- so much greater will be the production of material Wealth. On the other hand, the more goods that the material producers produce, the more will mental production be capable of being promoted.

The most important division of occupations, and the most important cooperation of productive powers in material production, is that of agriculture and manufacture. Both depend mutually upon one another, as we have shown.

As in the pin manufactory, so also in the nation does the productiveness of every individual -- of every separate branch of production -- and finally of the whole nation depend on the exertions of all individuals standing in proper relation to one another. We call this relation the balance or the harmony of the productive powers." (List, 1841a, p.159)



List gives an example of how an invention may increase production tenfold by improving the capital of mind, and concludes that these social and intellectual conditions are more important than mere accumulation of material capital,

Suppose ten single woollen weavers in the country possess a thousand dollars capital each; ... each produces not more than a thousand dollars of cloth a year. Suppose now, they invent a spinning machine, ... The same capital of matter ... produces now by the improved social and intellectual conditions, or by the acquired capital of mind, \$100,000 worth of broad cloth. So can a nation with the same existing matter improve its productive power tenfold in improving its social and intellectual conditions. (List, 1827b, p. 63)

#### 4.10 Capital of mind

Adam Smith, and thereby Jean-Baptiste Say, David Ricardo and Karl Marx, focused on matter and therefore on the manual side of labour. Thereby they came to diminish and even exclude the role of mind-related factors, concerning wealth promotion.

List, however, mocked those who do not distinguish between the potential productivity of a Kepler and that of a donkey (Cf. List, 1841a, pp. 142ff; cf. p. 159). List maintained that Adam Smith and Jean Baptiste Say overdid their focus on exchange (monetary) value.

List claimed that they ignored the intellectual, moral and religious activity behind the only apparent productive forces and thence behind exchange value.

The following quotation gives us a condensed expression of List's criticism, where he says they the focus on gaining matter instead of the ability to produce, they generalise and materialise the concept of capital and overdo its importance. List writes,

... Smith and Say ...

As these theorists confounded cosmopolitical principles with political principles, so they entirely misapprehend the object of political economy. The object is not to *gain matter, in exchanging matter for matter*, as it is in the individual and cosmopolitical economy, and particularly in the trade of a merchant. But it is to gain productive and *political power* by means of exchange with other nations; or to prevent the depression of productive and political power, by restricting that exchange. They treat, therefore, principally of *the effects of exchange of matter*, instead of treating of *productive power*. And as they made not the productive power, and the causes of its rise and fall in a nation, the principal object of their inquiry, they neither appreciated the true effect of the different component parts of productive power, nor the true effect of the exchange of matter, nor of the consumption of it. They called the existing stock of matter, produced by human industry, by the general name of *capital*, and ascribed to the different component parts of this stock not only a *common and equal*, but an *omnipotent* effect. (List, 1827b, Letter IV, pp. 57)

List continues by arguing against Smith and Say's claim that growth is limited foremost by the amount of material capital. Instead, he claims that capital of nature and capital of mind is more important, probably having in mind that clever a mind can find a way to transform nature,

The industry of a people is, according to them, restricted to the amount of capital, or stock of produced matter; they did not consider that the productiveness of this capital depends upon the means afforded by nature, and upon the intellectual and social conditions of a nation. It will be shown hereafter that if the science requires for the existing stock of produced matter the general term of *capital*, it is equally necessary to create for the existing stock of natural means, as well as for the existing state of social and intellectual conditions, a general term: in other words, there is a *capital* of nature, a capital of mind, and a capital of productive matter, and the productive powers of a nation depend not only upon the latter, but also and principally upon the former. (List, 1827b, Letter IV, pp. 57-59)

We here see that List has a clear focus on the nature and role of capital and its implications, which since has been lost to most economists.<sup>211</sup> List begins his *On the Nature and Value of a Nation's Forces of Production* by arguing that that the statesman and legislator should not care so much about tangible goods, but rather focus on those (immaterial) forces and institutions that produce and assure national welfare,

... if we are to learn how entire nations achieve prosperity and affluence, we must not confine ourselves to an enquiry as to the way in which individuals produce material goods, distribute them amongst themselves and consume them. Such would be a teaching which might satisfy the individual merchant, manufacturer or farmer, but to the statesman and legislator it must appear as not adequate for his greater efficacy. For him it is not so much a matter of amassing valuable objects in the hands of individuals, but rather of assembling those forces and those institutions by which the welfare of

---

<sup>211</sup> One example of how the material aspect has been allowed to dominate may be found in economic history, not least among historians influenced by Marxism. The development of European capitalism may here be explained as a result of plundering amassment of monetary riches from colonies, and international trade and war seen as efforts to rob competing nations of their surplus (Cf. e.g. Wallerstein, 1974, p. 222). Although important, expansion of the monetary base offers a poor and insipid explanation of contemporary scientific and technical advance in Europe. European history may with advantage be compared to the lack of such advance in expansionist robber states in history, such as the Mongolian Empire – but only to some extent so, since Mongolia also had her qualities. A different and complementing angle on history may be found in the argument that the cultural revolution of the Renaissance and Reformation charged the European continent with a spirit of individual freedom and exploring endeavour (Cf. e.g. Reinert and Daastol, 1996: *Exploring the Genesis of Economic Innovations: The religious gestalt-switch and the duty to invent as preconditions for economic growth*).

the whole nation is produced and assured. (List, 1839c, p. 101, my translation)

List claimed that (mentally based) inventions increase human power,

Mental work is in the social economy what the soul is to the body. By means of new inventions, it continuously increases the power of the human being. Let us here recall only the achievements of the few to whose work we owe the invention and perfection of the steam engine ... They have provided a small number of people with the power which had required millions of hands earlier. (List, 1927-36, vol.5, 1930, p. 42)

List argues that the ‘popular school’ of Adam Smith and his admirers (and we might add, including Marx on this point) have made a serious mistake in focusing on money and physical labour alone,

We now see into what extraordinary mistakes and contradictions the popular school has fallen in making material wealth or value of exchange the sole object of its investigations, and by regarding mere bodily labour as the sole productive power. (List, 1841a, p. 142)

Moreover, List ironically comments that,

The man who breeds pigs is, according to this school, a productive member of the community, but he who educates men is a mere non-productive. .... A Newton, a Watt, or a Kepler is not so productive as a donkey (List, 1841a, p. 142)

List’s rather hilarious point here is obvious; that the popular school with this practice hampers and even prevents herself from realising the obvious; that much even of the material progress over the past Millennium is due to scientific progress.

List details some elements that constitute the productive powers, and practically all of these are institutions and inventions resulting from mental exertions, and consequently therefore part of the mental capital. To illustrate the importance of spiritual liberty, he suggests comparing England with Spain,

The Christian religion, monogamy, abolition of slavery and of vassalage, hereditability of the throne, invention of printing, of the press, of the postal system, of money weights and measures, of the calendar, of watches, of police, 'the introduction of the principle of freehold property, of means of transport, are rich sources of productive power. To be convinced of this, we need only compare the condition of the European states with that of the Asiatic ones. In order duly to estimate the influence which liberty of thought and conscience has on the productive forces of nations, we need only read the history of England and then that of Spain. (List, 1841a, p. 139)

In his discussion over the causes of England’s success, List in particular points to the “the moral forces” and the geographical position

(Cf. List, 1841a, pp. 48-52). The production factor and value that List cherished most of all was freedom and sound institutions, and he believed that other nations are capable of raising themselves to the same degree of liberty,

It is especially owing to her civil, mental, and religious liberty, to the nature and excellence of her political institutions, that the commercial policy of England has been enabled to make the most of the natural riches of the country, and fully to develop the productive powers of the nation. But who would deny that other nations are capable of raising themselves to the same degree of liberty? (List, 1841a, p. 322)<sup>212</sup>

A crucial element in 'Capital of Mind', is not only - the heart and wit part of it - moral and intellectual development, but also political will-power. List writes,

..., those nations which feel themselves to be capable, owing to their moral, intellectual, social, and political circumstances, of developing a manufacturing power of their own must adopt the system of protection as the most effectual means for this purpose. (List, 1841a, pp. 131-132)

And List ends his *National System* ... with a call for action,

... all that is required of the Governments can be expressed in one word, and that is - ENERGY. (List, 1841a, p. 435)<sup>213</sup>

The Austrian philosopher Rudolf Steiner is a clear thinker regarding the fundamental relations between economics and the human mind. In his lectures held in 1922, Steiner argues that Spirit gives Labour a certain direction, which transforms Nature, and thus produces Goods and Capital, and eventually value. Therefore, the origin of value in economics is the Spirit (human intelligence). In a rather complex and unusual discussion, put simple, he writes,

We must always go back to the real origins whence the economic process is nourished, on the one hand, and by which, on the other hand, it is regulated - Nature on the one hand, Spirit on the other.

Now if you take the ordinary economic doctrines, you will generally find three factors mentioned ... Nature, human Labour and Capital. ... But if we take Nature, Labour and Capital simply side by side in this way, we shall not grasp the economic process in a living way.... there is the underlying idea of taking hold of something static and giving it a definition, whereas in the real economic process things are in perpetual movement.

In the study of Economics it is quite impossible to stop short at definitions of Value and Price. We must always go back to the real origins whence

---

<sup>212</sup> This quotation has also been used in the section *Colonies, the international division of labour and free trade*.

<sup>213</sup> This little quote has also been used elsewhere, in the section *Realist and Idealist Methods*, in chapter 2; and *Critic of Malthus' materialism*, in chapter 3.

the economic process is nourished, on the one hand, and by which, on the other hand, it is regulated — Nature on the one hand, Spirit on the other.

...

Nature is the basis of economy. ... labour as such has no purpose at all in Economics.... labour, economically speaking, is some-thing neutral and irrelevant. But it becomes an economic value-creating factor the moment we let it be directed by the intelligence of man. ... the essential point is this: Through the Spirit — by intelligence, reflection, perhaps even speculation — Labour is given a certain direction: the various units of Labour are brought into certain mutual relations, and so on. (Steiner, 1922, Lecture II)<sup>214</sup>

#### 4.11 Accumulated capital of mind

Terms such ‘innovation’ and ‘progress’ point to how the future will shape ‘mental capital’, but List repeatedly emphasized that ‘mental capital’ had a social and an historical background - in the thousand years of accumu-

---

<sup>214</sup> Steiner also criticises the static character of economic theory which does not grasp the dynamic character of the real world of economics;

“In all economic theories of modern time, this has been the difficulty: *they have always tried to hold fast at the outset that which is really fluctuating*. ... the point is that even men of considerable insight, in developing their theory of Economics, have stumbled again and again over this obstacle: They have tried to observe at rest things that are always in a state of flux. ... as though it were composed of a multitude of tiny states of rest and jump from one to the other. For when we *integrate*, we regard even movement as if it were composed of states of rest.

On the model of such a science we cannot study the economic process.” (Steiner, 1922, Lecture II)

Furthermore, Steiner argues that not price formation, but exchange of values, is the essential activity in economics, and to understand this field we must search for the source of this value,

“Again and again one is astonished to find Price discussed in the ordinary works on Economics, as though it were possible to define it. ... The economic process takes its course in the activities of buying and selling. Buying and selling are essentially an exchange of values ... In Economics we must not speak of “goods ” but of “values” as the elementary thing. It is wrong to try to consider Price in any other way than by envisaging the interplay of values. Value set against value gives you Price. ... there is, in fact, no other exchange than that of values. Properly speaking, it is wrong to speak of an exchange of goods. The “goods ” that play a part in the economic process — whether they appear as modified products of Nature or modified Labour — are always *values*. ... Wherever Price emerges, it is always through the impact of value on value in the economic process. ... We must go back to that which creates the value: ... The value that is thus produced through human Labour is a modified object of Nature.” (Steiner, 1922, Lecture II)

lated societal experience, ‘materialised’ in formal and informal behaviour and –institutions; habits; customs; morality; legal and organisational framework etc.; all constituting a nation’s traditional culture. The connects List to the insights of the Conservative- and Romantic traditions, which influenced his contemporary Historical School of Jurisprudence<sup>215</sup> and were to influence the later Historical School of Economics, following List.

There is far more to List’s concepts of ‘Capital of Mind’ or ‘Mental Capital’ than an individualistic perspective could reveal, since with List the term ‘mental capital’ includes knowledge historically created, and stored in institutions and indirectly also in physical capital,

The present state of the nations is the result of the accumulation of all discoveries, inventions, improvements, perfections, and exertions of all generations which have lived before us; they form the mental capital of the present human race, and every separate nation is productive only in the proportion in which it has known how to appropriate these attainments of former generations and to increase them by its own acquirements, in which the natural capabilities of its territory, its extent and geographical position, its population and political power, have been able to develop as completely and symmetrically as possible all sources of wealth within its boundaries, and to extend its moral, intellectual, commercial, and political influence over less advanced nations and especially over the affairs of the world. (List, 1841a, p. 140)

In this, List follows Adam Müller who dealt extensively with this issue of “intergenerational” creation of capital (Cf. Müller, 1808-09, Lecture 24: *About national capital and national credit*). List claims that we can only explain the present elevated standing in material wealth as a result of a historical progress during a thousand years with accumulation of mental capital over many generations, and a nation can only progress to the degree that it is able to take possession of and utilise this immaterial and historical fund,

If we consider merely bodily labour as the cause of wealth, how can we then explain why modern nations are incomparably richer, more populous, more powerful, and prosperous than the nations of ancient times? The ancient nations employed (in proportion to the whole population) infinitely more hands, the work was much harder, each individual possessed much more land, and yet the masses were much worse fed and clothed than is the case in modern nations. In order to explain these phenomena, we must refer to the progress which has been made in the course of the last thousand years in sciences and arts, domestic and public regulations, cultivation of the mind and capabilities of production. (List, 1841a, ch. 12, p. 139)<sup>216</sup>

---

<sup>215</sup> For instance; Friedrich Carl von Savigny (1779-1861) and Karl Friedrich von Eichhorn (1781-1854).

<sup>216</sup> Here is the quotation in the German original: „Der jetzige Zustand der Nationen ist eine Folge der Anhäufung aller Entdeckungen, Erfindungen, Verbesserungen, Vervollkommnungen und Anstrengungen aller Generationen, die vor

Since co-operation of labour necessitates “mentally based” activity, it is only natural that ‘Mental capital’ in List’s opinion was the core of the productive powers. This value of networking has increasingly been referred to as ‘social capital’<sup>217</sup>

Among those who have noticed this point in List’s argument, ‘mental capital’ is often regarded as synonymous to ‘human capital’, which in the modern literature is understood as being an individualistic phenomenon.

Know-how is established by learning, which is accumulated into *Capital of Mind*, as List put it, or as we would say today, *Human Capital*.

However, there is a slight difference in emphasis here. Whereas *Human Capital* tends to be seen as individual, *Capital of Mind* is a more collective and historical concept, referring to its character of being accumulated over the years. Institutions are a good example of this, as they are built over time and they are collective.<sup>218</sup> Yet, they are not accounted for as human capital. ‘Governance’ is one modern concept for a tiny part of what List is referring to as ‘Capital of Mind’.

#### 4.12 Human Capital

The spirit of times change, and sometimes not to the better. The Norwegian Professor of Law, Statistics and State Economics, Anton Martin Schweigaard,<sup>219</sup> was characterised as the high priest of materialism by his contemporary national poetic heroes such as Bjørnson (the Nobel laureate), Wergeland and Vinje. Nevertheless, and much like List, he argues against the English conception of an egotistic ‘economic man’ and in 1847 Schweigaard wrote that the most important factors of production are immaterial,

The result of human labour is not only dependent upon its strength and perseverance, but is to a considerable degree also dependent on the leadership of labour. ...

---

uns gelebt haben, sie bilden das geistige Kapital der lebendigen Menschheit, und jede Nation ist nur produktiv in dem Verhältnis, in dem sie diese Errungenschaften früherer Generationen in sich aufzunehmen und durch eigene Erwerbungen zu vermehren gewußt hat.“

<sup>217</sup> The issue of ‘social capital’ has been discussed in a section below; *Networking and Social Capital*.

<sup>218</sup> See also the sections below, such as *Networking and Social Capital*.

<sup>219</sup> The Norwegian Professor of Law, Statistics and State Economics, Anton Martin Schweigaard, was also a practical man and the most important statesman in Norway in the 19<sup>th</sup> Century. He promoted a national market e.g. by building railroads and a liberal trade policy, removing ancient trade privileges of the towns.

... inner religious, moral and political social relations, have not priority after but priority before the external preconditions of production.  
(Schweigaard, 1847)<sup>220</sup>

Following Schweigaard, a number of Norwegian economists followed in his footsteps, but - as in other European countries - the English classical school gradually came to dominate and the emphasis on immaterial factors was lost.

Nevertheless, research along the lines of Moses Abramowitz and Robert Solow (Cf. Abramowitz, 1956 and Solow, 1957, p. 320)<sup>221</sup> was also done elsewhere, as in Norway. Heretic opinions along the lines of List's argument were not well received, however: "Already" in 1952, a group of economists at the Ministry of Finance wrote a report, *The Economic Policy Instruments*, arguing that the rate of investment should receive less emphasis. Instead, more attention should be directed to "organisational and administrative means". And in this way it would,

"... doubtlessly be possible to increase productivity without or with relatively moderate investments". ("Group", 1952, quoted in Bergh and Hanisch, 1984, p. 234).<sup>222</sup>

In 1958, and based on careful econometric research, Odd Aukrust (the director of Norway's SSB – the national Statistical Central Bureau) published an article called *Investments and economic growth*. He argues that

We have tried to increase the rate of progress by keeping a high rate of investment. We should carefully consider whether there might not be more to gain by increased efforts in research and education. (Aukrust and Bjerke, 1958, p. 66, quoted in Bergh and Hanisch, 1984, p. 234)<sup>223</sup>

These arguments did not win the day. Erik Brofoss was Norway's Finance Minister and the main architect of the investment policy after WW II. Brofoss' exposed his reaction directed specifically to Aukrust's

---

<sup>220</sup> The original text in Norwegian reads: "Udbyttet av det menneskelige Arbeid er ikke alene afhængigt af dets Styrke og Udholdenhed, men i Væsentlig Grad ogsaa af den Indsigt hvoraf det ledes". He furthermore wrote that "indre religiøse, moralske og politiske Samfundsforhold, som i Vigtighed ikke staar tilbage for, men have Overvægten over de mere udvortes betingelser for Produktionens Gang." Quoted in Bergh & Hanisch, 1984, p. 34

<sup>221</sup> Cf. the section below, *Growth theory – thought as the lacking source*.

<sup>222</sup> The original text in Norwegian reads: "utvilsomt være mulig å øke produktiviteten uten eller med forholdsvis beskjedne investeringer."

<sup>223</sup> The original text in Norwegian reads: "Vi har prøvd å presse framstegstakten i været ved å holde investeringsnivået høyt. Vi bør tenke alvorlig over om det ikke er mer å hente ved økt innsats innenfor forskning og undervisning." The article was based on the research by Odd Aukrust and Juul Bjerke published as *Real kapital og økonomisk vekst 1900-1956* (*Real capital and economic growth 1900-1956*) (Aukrust and Bjerke, 1958)



argument of re-orientation, in a letter to (the Nobel laureate) Ragnar Frisch in 1960. Brofoss' wrote that,

I consider this pure nonsense. (Brofoss, 1960, quoted in Bergh and Hanisch, 1984, p. 234)<sup>224</sup>

Starting in the 1960s, there has been extensive work done around the concept of 'Human Capital', following the pioneering works of Theodore Schultz (Cf. *The Economic Value of Education*, Schultz, 1963) and the Nobel Laureate Gary Becker (Cf. *Human Capital ... with Special Reference to Education*, Becker, 1964). They both focused on education as an investment, as List did more than one century earlier.

These rather belated efforts to include immaterial- or non-manual work, have in economics increasingly resulted in growth models that have broaden the term 'capital' to include knowledge- and human capital. Nevertheless, as in common in economics, these growth models have only sluggishly found their way into standard textbooks, indicating their rather ad-hoc nature to the core of economic theory.

For instance, the standard textbook by Dornbusch and Fischer does not mention this at all in the 1978 edition, whereas Mankiw's later edition from 2002, does mention human capital but briefly and superficially.

In more detail: C. E. Ferguson and J. P. Gould's *Microeconomic Theory* from 1975 does not mention human capital at all (Cf. Ferguson and Gould, 1975). Hugh Gravelle and Ray Rees's *Microeconomics*, from 1981 spend one page of over 600 pages, on the difference between human capital and physical capital. But they do not at all evaluate the importance of human capital or how to promote it (Cf. Gravelle and Rees, 1981). *Macroeconomics*, by Rudiger Dornbusch and Stanley Fisher in 1978, does not mention human capital at all (Cf. Dornbusch and Fisher, 1978).

N. Gregory Mankiw's textbook *Microeconomics*, discusses human capital on four pages, but solely from an individualistic angle and he focuses singularly on the effect on wages, not on the national effects. He spends just as much text on the role of education as a signal of achievement for the individual person, as he spends on the role of general education for society (Cf. Mankiw, 2002, p. 407).

Reinert and Daastol comment the failure of human capital theory to see the larger picture; knowledge also must be set to practical use through e.g. government intervention creating incentives and investments. In other words, individualistic human capital theory alone, would not be a satisfactory strategy guide for investments, and needs to be complemented to secure a more holistic investment approach,

By seeing the learning process only as a process of accumulation of 'human capital', mainstream theory loses an important point: Human capital

---

<sup>224</sup> The original text in Norwegian reads, «Det anser jeg for det rene sludder.»

is only of measurable value where a technological 'window-of-opportunity' - a new idea - creates a demand for this knowledge. Where human capital is accumulated without the demand for knowledge, which is essentially created by new ideas, the result is unemployment and/or a 'brain drain'. (Reinert and Daastol, 1997, p. 263)

In other words, it is not enough that the State creates a supply of knowledge. It also has to create a demand for it. List's ready reply was to promote incentives for the construction of e.g. infrastructure like railroads, and this later became a prime driver for development for one Century, like electricity grids, and networks for telegraph, telephone, the internet, and highways.

#### **4.13 Knowledge and information economics**

In the 1960s, various theories appeared in the Western academic world in order to explain the residual factor, which according to Solow is responsible for the 87.5 % 'residual' of growth that conventional theories of capital accumulation could not explain, in the Physiocratic and 'Smithian' tradition. Knowledge production was then included into the production function, but the source of knowledge and therefore how to promote it, was still to be hidden in the black box.

The Austrian born economist Fritz Machlup was a student of Ludvig von Mises. Machlup writes that Adam Smith and especially Friedrich List was among those forerunners of the approach of internalising knowledge as a factor of production, as opposed to the exogenous role it normally has played in economics,

The "promotion" of knowledge from the rank of an exogenous independent variable to that of an endogenous variable dependent on input, on the allocation of resources, is an important step. Not that this idea is a novel one. Adam Smith in 1776 wrote that "man educated at the expense of much labor and time ... may be compared to one of those expensive machines,"<sup>225</sup> and the notion of the "capital concept applied to man"<sup>226</sup> has never completely disappeared from the economic treatises. It was especially emphasised by writers, such as Friedrich List, who gave much prominence to the development of the productive forces of man. (Machlup, 1962, p. 5)

Machlup founded the subject of knowledge economics and information economics. His research on the patent system made him realise that it was only a part of the much larger 'knowledge economy'. Incorporating everything related to communication, he found that already in 1959, some 29 % of the GDP in the USA had been produced by this sec-

---

<sup>225</sup> 1 Adam Smith, *An Inquiry into the Nature and Causes of the Wealth of Nations* (Everyman's Library, 1910), Vol. I, pp. 88-89. (Machlup's note)

<sup>226</sup> 2 R.J. Walsh, "Capital Concept Applied to Man," *Quarterly Journal of Economics*, Vol. XLIX (1935), p. 255ff. (Machlup's note)

tor. Furthermore, of the total civilian labour force 43 % were employed as knowledge transmitters or - receivers. The growth was also staggering: Between 1900 and 1959, the sector's proportion of the labour force increased from 11 to 32 percent. The growth towards a knowledge economy can be described as a greater reliance on immaterial input than on material input, or in more economic terms, a greater reliance on intellectual input than on input of real capital and raw materials. Information and media are typical examples of this, and have become key drivers in modern economies, replacing traditional industrial goods. One example is computer games; and although at first sight not the most productive one, the possible implementations are vast, as in air pilot simulations, training in steering container ships etc.

#### **4.14 List's predecessors - Conservatism and Romanticism**

Not many known economists precede List in his immaterial approach, but he possibly learned from Adam Müller, who also considered the state as the most important type of capital of a nation, as in his lecture on 'On Division of Labour and Spiritual Capital' (*Von der Teilung der Arbeit und vom geistigen Kapital*, Müller, 1808-1809, book V, Lecture 26).

There are different opinions regarding Müller's influence on List. Charles Rist denies outright that List was inspired by Müller (Cf. Rist and Gide, 1909, pp. 286n), while John Kells Ingram claims exactly the opposite (Cf. Ingram, 1888, ch. 5). Without further inquiry, I would side with Ingram and accept Müller as predecessor to List on this issue, since Ingram is an insider to the tradition following List. Furthermore, although List never refers to Müller (which is customary when one agrees), List met with Müller in Vienna in 1820.

In any case, the similarities in analysis are startling, and so are the differences in their conclusions: Müller preferred the old stable society whereas List eagerly looked towards the new mobile society, much like Hegel.

Adam Müller happened to be one of Edmund Burke's greatest admirers in the German-speaking world.<sup>227</sup> Burke is generally viewed as both the founder of modern Conservatism, and simultaneously a representative of classical liberalism. He was a decisive inspiration for the Historical School of Jurisprudence both in Germany and in Great Britain, and along with J.G. Fichte; he was the major inspiration for the Romantic School in economics, such as Adam Müller. In the *Encyclopedia Britannica* 1902, John Kells Ingram writes that Müller precedes the German Historical School in his criticism of the materialist doctrines of Smith

---

<sup>227</sup> Edmund Burke, of Norman-Irish stock, is also known for his support of the American Revolutionaries, opposition to the French Revolution, and served as a representative in Great Britain's House of Commons.

and his own emphasis on the importance of immaterial factors, such as co-operation and spiritual capital,

Adam Müller (1779-1829) was undoubtedly a man of real genius. ...

He protests against the doctrine of Smith and against modern political economy in general on the ground that it presents a mechanical, atomistic, and purely material conception of society, that it reduces to nullity all moral forces and ignores the necessity of a moral order, that it is at bottom no more than a theory of private property and private interests, and takes no account of the life of the people as a whole in its national solidarity and historical continuity. Exclusive attention, he complains, is devoted to the immediate production of objects possessing exchange value and to the transitory existence of individuals; whilst to the maintenance of the collective production for future generations, to intellectual products, powers, possessions and enjoyments, and to the State with its higher tasks and aims, scarcely a thought is given. ... For the continent of Europe a quite different system is necessary, in which, in place of the sum of the private wealth of individuals being viewed as the primary object, the real wealth of the nation and the production of national power shall be made to predominate, and along with the division of labour its national union and concentration along with the physical, no less the intellectual and moral, capital shall be embraced. In these leading traits of Müller's thought there is much which foreshadows the more recent forms of German economic and sociological speculation, especially those characteristic of the "Historical" school. (Ingram, 1888, ch.5)

According to Roll, Müller's theory of capital and production is that spiritual capital is a core part of the factors of production, but economists have ignored this,

The factors of production are not land, labour and capital, but nature, man and the past. The last includes all capital, physical and spiritual, which has been built up in the course of time and is now available to help man in production. Economists, says Müller, have tended to ignore spiritual capital. The fund of experience which past exertion has made available is put in motion by language, speech and writing; and it is the duty of scholarship to preserve and increase it. All these elements collaborate in production; though in different spheres the emphasis will differ. In agriculture the stress is on landed property; in industry it is on labour; in commerce on capital, particularly in its monetary form; and in science the accent is on the capital of ideas. But in all of them the other elements are also preserved. Feudalism is praised because its social structure reflected the existence of these factors of production. Land leads to nobility, labour to the estate of the burgher, spiritual capital to the clergy. As for physical capital, it was at first also attached to the clergy; but the disintegration of feudalism brought a separation between physical and spiritual capital. The concept of physical capital began to invade every other factor and gain supremacy over the whole of civic life. Physical capital acquired the strongest influence in all spheres of production and economists began to distinguish land, labour and capital only. (Roll, 1978, p. 224)

Roscher criticises Müller for just being descriptive and not making clear the essence of immaterial capital,

The concept of capital should not be limited to real products, but Müller fails to make clear the essence of immaterial capital. It presents itself in various ways in the language, as the physical presents itself mainly in money.<sup>228</sup> The most important part of every merchant capital is trade experience,<sup>229</sup> Taxes are not seen as insurance premium by Müller, but rather as interest on the invisible and yet completely necessary immaterial capital, which lies in the State. Even the armies, fortresses, laws of a people, are in their own peculiarities integrated parts of the national wealth.<sup>230</sup> Sometimes, however, he expresses himself as if the immaterial capital of the people coincides with the religion or the spiritual power. (Roscher, 1874, p. 768, my translation)<sup>231</sup>

#### 4.15 Comments on List's approach to Capital of Mind

List's insights into the importance of immaterial production factors or 'intangible capital' have of course been noted on earlier occasions in history.

The accumulation theory of growth was claimed by Adam Smith in 1776 (Smith, 1776, *Introduction* and book, IV, ch. II). In 1904, J. Shield Nicholson writes an 'Introductory Essay', to the English translation of *The National System*. Nicholson applauds List's criticism of the limited view of capital as material only: "List did good service in showing that mere accumulation is of minor importance", thereby supporting List's criticism of Adam Smith, who had claimed that accumulation depended on the amount of material saving, as opposed to for instance investment in human resources,

... List's system is emphatically and explicitly the national system of political economy.

Next in importance to his doctrine of nationality must be placed his position on immaterial capital and productive powers. Adam Smith had included under the fixed capital of a nation the natural and acquired abilities of its inhabitants, but for a long time both in theory and practice the term 'capital' was narrowed down to purely material forms. If this change of definition had been made merely in deference to popular usage, in order to avoid confusion, no harm might have ensued; but, unfortunately, with their exclusion from capital the immaterial productive forces and powers were dropped from the popular arguments altogether. Apparently the wealth of nations was supposed to depend principally on the accumulation of material capital, which was necessary to provide both the auxiliary aids to labour and its subsistence. List did good service in showing that mere accumula-

---

<sup>228</sup> 2: E, III, 40 ff. (Roscher's note)

<sup>229</sup> 3: Briefw. Mit Gentz, 214 (Roscher's note)

<sup>230</sup> Verm. Schr. I, 65 (Roscher's note)

<sup>231</sup> 'Geistiges Kapital' is here literally translated, not as 'immaterial capital' but rather as 'spiritual capital'.

tion is of minor importance compared with the organisation of the productive forces of society. ‘ (Nicholson, 1904, in the English translation in 1884 of *The National System*, List, 1841a, 1884)

Nicholson errs, however, in placing the concept of ‘mental capital’ below that of the ‘nation’ in importance. Mental capital constitutes the nation through the confederation of labour and is therefore primary, not secondary.

In his lecture, *Friedrich List: The National Political Economy Revisited*, David Calleo<sup>232</sup> describes the idealist and immaterial essence of List’s message, and therefore “List defended spending for education, the arts, justice, or defense .,. also for the sake of the economy’s efficiency”

Friedrich List (1789–1846) was a German liberal nationalist, deeply imbued with the Idealist view of reality that returned to fashion with Romanticism. ... <sup>2</sup> List is famous, above all, for his nationalist critique of Adam Smith’s celebrated concept of the “division of labor.” It is not merely the division of labor that makes the modern economy possible, List taught, but the “union of labor”—the “confederation or union of various energies, intelligences, and powers on behalf of a common production.”<sup>233</sup> An efficient union of labor depends on being situated in a cultural community conducive to it, in other words, in a nation with broadly shared cultural and moral values that foster cooperation. Linked to these values are many of a society’s nonmaterial elements: culture, morality, communication, and fellowship, together with human rights, laws, politics, and national security. To grasp the influence of such immaterial elements as liberty of thought and conscience on the productive force of nations, List suggested reading “the history of England and then that of Spain.”<sup>234</sup> A rich civic culture had made England durably prosperous, while the lack of such a culture had left Spain poor, despite the huge wealth that had passed through Spanish hands. List sharply criticized Smith and his followers for their “materialism”—for depicting mental forces as mere by-products of material circumstances. Accordingly, List defended spending for education, the arts, justice, or defense not only for aesthetic, moral, or military reasons but also for the sake of the economy’s efficiency. Such expenditures were “consumption of present values” to nourish “future productive powers.” He ridiculed the view of economic development that led Smith to count such expenditures as subtractions from economic values. The causes of idleness and wealth among men could not be explained merely by a study of their limbs and other body parts, while one ignored “the spirit which animates the individuals, the social order which renders their energy fruitful, and the powers of nature which they are in a position to make use of.”<sup>235</sup> (Calleo, 2001, pp. 70-71)

---

<sup>232</sup> Professor and Director of the European Studies Department at the Johns Hopkins University School of Advanced International Studies since 1968.

<sup>233</sup> 3: Friedrich List, *The National System of Political Economy* (New York: Augustus M. Kelley, 1966; originally published 1841), pp. 149–150. (Calleo’s note)

<sup>234</sup> 4: Ibid., p. 139. (Calleo’s note)

<sup>235</sup> 5: Ibid., p. 136. (Calleo’s note)

In their *Doctrines of Development*, Cowen and Shenton have noticed the mechanic understanding of the productive powers in Smith and Hamilton, and concluded that List extended Hamilton's concept. That is perhaps stretching Hamilton a bit too much and too gently, since there is hardly any notice of this factor in Hamilton - actually less than with Smith. Furthermore, they fail to see List's connection to older German and European literature, apart from correctly identifying Adam Müller as a possible source,

List arrived at this doctrine of national development primarily through a reworking of Adam Smith's concept of 'productive powers', the concept which was central to Hamilton's *Report*. In particular, List repeated Hamilton's argument that it was manufacturing which conveyed the greatest potential for realising the improvements of productive powers. Through reworking the concept of productive powers, List extended the concept beyond Hamilton's mainly restricted technical sense of 'powers' by furnishing the power of productive *force* with moral or 'spiritual' meaning. While there has been debate over the immediate source of List's spiritual morality, one plausible candidate might be Adam Muller, ... Whatever his source, List's moral dimension of productive force is crucial for making sense of the various ways in which he uses the concept in his *National System*, for an understanding of the basis of the system and, not least, for why productive force has entered into the expanded domain of development. (Cowen and Shenton, 1996, p. 159)

In 1963, Robert Eckert wrote his PhD dissertation called *Friedrich List's Stay in America and its Importance for the Listian System* (Eckert, 1963).<sup>236</sup> Eckert spends the second chapter on *The Theory of the Productive Forces*, on the concept itself and the American influence on the concept. He points out the core of the theory as the immaterial factors and finds support in Egon Koeppel's dissertation (Koeppel, 1936). Eckert also quotes from a lecture by Clausen in 1961, where Clausen says about List that,

When he speaks of productive forces, he simply means the dynamic Element. (Eckert, 1963, p. 25)

Eckert comments on List that,

The Listian theory is a theory of possibilities. (Eckert, 1963, p. 26)

Eckert agrees with Weippert who calls List a ...

Thinker of possibilities. (Weippert, 1956, p. 83)

---

<sup>236</sup> In the German original: *Der Amerikaaufenthalt Friedrich Lists in seiner Bedeutung für das Listische System*.

David Levi-Faur's work on List is noteworthy for his depth of understanding the core of List. He notes that with List the role of protection was to promote capital of mind,

Protection, in certain cases, is therefore recommended and justified as an education tax that would enable the Americans to engage in equal exchange with the British, i.e. exchange not only matter for matter but also mental capital for mental capital . . . According to List, the role of the state in such a case was to create adequate conditions for the development of American mental capital. These conditions, however, could not be provided unless a managed trade policy was implemented. (Levi-Faur 1997a, p. 166)

David Levi-Faur notes that List sets capital of mind before other kind of capital. He writes that with List "the various types of capital have a hierarchical order, and that mental capital is the most important",

According to List, these three types of capital are distinguishable according to their relative importance to the creation of wealth: natural and material capital are inferior to mental capital. Economic policy making that is aimed at the development of mental capital, all other things being equal, will result in better performances than economic policy that aims to enlarge the development of natural and material capital. (Levi-Faur 1997a, p. 158)<sup>237</sup>

This may well be what List intends, and it does indeed seem so, but List does not write it. Instead, List writes,

..., there are a capital of nature, a capital of mind, and a capital of productive matter, and the productive powers of a nation depend not only upon the latter, but also and principally upon the two former. (List, 1827b, p. 188)

Levi-Faur criticises Smith and the Classical school for failing to "identify properly the causes of wealth", and correctly states that Smith's materialist outlook led Smith to focus on the division of labour as the source of wealth, and that this again was dependent upon accu-

---

<sup>237</sup> David Levi-Faur continues; "In order to clarify this point, List offered the example of two families, each with a farm and five sons. The father of the first family deposits his savings in the bank and maintains his sons in manual labour. In contrast, the father of the second family exploits his savings for the sake of his sons' education and grants them both time and encouragement for their own personal cultivation. ... The first father identified wealth with material capital and hence neglected the cultivation of his sons' mental abilities. The second identified wealth with mental capital and therefore invested in his sons' education. This story exemplifies List's strong conviction that the various types of capital have a hierarchical order, and that mental capital is the most important. This distinction further enabled him to argue that the first father acted according to the materialist conceptions of Adam Smith's followers, whereas the second father acted according to a human capital-oriented theory of policy making. (Levi-Faur 1997a, p. 159)



mulation of physical capital,

The example gives us the opportunity to examine critically the notion of human capital in classical economics and its distinction between wealth and the causes of wealth. I contend that following Adam Smith classical economic theory failed to identify properly the causes of wealth.

Indeed, Adam Smith made the distinction between wealth and causes of wealth a central point in his criticism of the mercantilists' perceptions of the role of silver and gold as sources of wealth. As alternatives to gold and silver, Smith offered the division of labour and the accumulation of capital as primary *causes* of development. This, however, led neoclassical economic theory to adopt a materialist notion of social change and economic development. Indeed, it is the division of labour that received most of Adam Smith's attention. ... Yet, a division of labour is conceived by him as dependent on the accumulation of capital, and so 'the accumulation of stock must, in the nature of things, be previous to the division of labour' (Smith, 1776: 260). Thus, it is the accumulation of capital that enhances the division of labour and it is the division of labour which in turn makes possible the further increase in the accumulation of capital. In Smith's own words, 'As the accumulation of stock is previously necessary for carrying on this great improvement in the productive powers of labour, so that accumulation naturally leads to this improvement' (Smith, 1776: 260). The process of accumulation, which contiguously furthers the division of labour, is hence *the process of economic development*.<sup>11</sup> (Levi-Faur 1997a, pp. 158-159)

Ten pages further down, Levi-Faur continues by discussing the Classic Schools neglect of human capital, and again correctly states that when it eventually was paid respect in the 1960s, it was interpreted in an individualistic fashion that omitted the role of institutions and the State,

Smith's concept of economic development was criticized by List. It is not that List rejected the importance of Smith's notion of the division of labour, nor did he reject the importance of trade and savings as instruments of economic development, but in his view they are inferior to the augmentation of mental capital. In modern terminology we may say that List emphasized the importance of human capital in economic development.<sup>12</sup> The importance of human capital had been neglected in mainstream economic theory. This much has already been argued by Mark Blaug: '[the classical economists] simply failed to explore the implication of a human capital view of labour supply. Adam Smith made a start; John Stuart Mill carried it a little further' (Blaug, 1975: 574).<sup>13</sup> The same point was made by List more than one hundred years ago when he emphasized the importance of human capital to economic development. List should be considered one of the founders of human capital theory and deserves more appreciation in this regard than he has received (see, for example, Kiker, 1966).

It was only in the 1960s, through the works of Gary S. Becker, that the concept of human capital was introduced into mainstream economic theory. Yet, even when it was finally introduced, it received an individualistic interpretation that hardly did justice to the important role of the state and nationalist movements in building a mass system of education – not as a response to individuals, or to a market-driven demand for education, but as

an elite effort to educate (and mobilize) the masses. (Levi-Faur 1997a, pp. 167-168)

Levi-Faur has also noted List's emphasis on the education system, and that it is integral to List's system rather than external as in Smith's system,

The source of the British trade superiority, argued List, was the British educational system: ...

Education is indigenous rather than exogenous to List's political economy. In the notion of productive powers, education is an important factor in national economic performance. A nation has to develop its educational system in accordance with its economic progress: ... (Levi-Faur 1997a, pp. 158-159)

List writes that more industrialised nations need better trained and more specialised people, who will command higher wages,

As a nation becomes more industrialised, it becomes more necessary to secure the service of suitable, trained people in the factories and workshops. Such people are now able to command higher salaries and wages than was formerly possible. It will be easier for them to devote themselves entirely to a particular branch of knowledge, provided that they have the necessary natural aptitude and the good preliminary training. Knowledge is becoming more specialised. (List, 1837a, p. 67)

#### **4.16 The Historical School on Capital of Mind**

In addition, other and later German economists within the Historical School stressed the importance of immaterial factors of production, such as the most prominent economist of the 'Older Historical School', Wilhelm Roscher. Roscher writes that historically progress towards freedom has been bought with great efforts, but "we are on the right road". Moral greatness is the foundation for material power, and industrial progress is but an instrument towards moral perfection, Roscher writes,<sup>238</sup>

---

<sup>238</sup> This is the beginning of the quotation; "The unvarying testimony of ages affirms the continued and gradual amelioration of man by individual energy and moral thought. ... Want and suffering have urged him forward. Foresight, labor, sacrifice and virtue have in part redeemed him. No right has been lessened or usurped, and every step in civilization has been a step in the way of freedom. Instead of making the latter responsible for a material and moral wretchedness which it is called upon to cure, we may prove, that, in proportion as real liberty and legal guaranties increase, evil diminishes.

We do not desire to yield to a convenient optimism, and deny the sufferings which weigh only too heavily on the world. We are far from having reached the end assigned to our efforts; but let not the hope we entertain of further progress blind us to that which has already been accomplished. This latter shows us that we are on the right road, and that we have not done unwisely in giving

On our moral greatness depends our material power. The elevation or debasement of character, the energy or debility of the will — such is the first source of good or evil. The world, a Chalmers rightly says, is so constituted that we should be materially happy if we were morally good.

Industrial progress helps, we have said, towards moral perfection. It is not the source of that perfection, but its instrument; for ignorance and misery, its habitual attendants, are poor advisers. Political Economy shows how the goods of this world are multiplied. (Roscher, 1877, § 14)

Roscher writes that intellect is the most important factor of political economy, and shows in the footnote that the classical philosophers warned against materialism,

Political economy treats chiefly of the material wants of nations. ... even in a material sense, the intellect of a people is their most important element, ... <sup>239</sup> (Roscher, 1877, § 21)

Apart from capital such as soil-improvements and physical capital Roscher mentions incorporeal capital that is not exhausted by use, thereby grasping a core meaning of public goods. He has interesting references in his footnote, mentioning Charles Ganilh (1815) and Justus Möser (1774–76) as predecessors regarding the importance and focus on ‘Mental Capital’, and later on Hermann Lotze (1856–1864),

There is also what may be called *incorporeal capital* (quasi-capital according to *Schmittthener*), which is as much the result of production as any other capital, and is used in production, but which, for the most part, is not exhausted by use. There are species of this kind of capital which may be transferred, as for instance, the good will of a well-established firm. Others are as inseparably connected with human capacity for labor as soil-improvements with a piece of land; *e.g.*, the greater dexterity acquired by a workman through scientific study, or the greater confidence he has acquired by long trial.<sup>240</sup> (Roscher, 1877, § 42)<sup>241</sup>

---

free rein to the human faculties. Sudden changes are made only in theaters. In the real world, the march of progress is slow and laborious. It may be accelerated by a happy hit; but it would be vain to try to hurry it. Man still suffers. No one desires to deny the evil, but only to estimate its extent. Yet it cannot be gainsaid that its fatal empire is narrowing instead of enlarging. Especially is it the progress accomplished in the higher regions of intellect and of the feelings which here exerts its beneficent influence.” (Roscher, 1877, § 14)

<sup>239</sup>Demosthenes ... shows the over-estimation of material things to be the principal cause of the decline of Athens ... Also *Phil.*, IV, 144, cautions us against the Manchester criterion of national prosperity. See *Plato*, *De Rep.*, VIII. ... (Roscher's note)

<sup>240</sup>Thus, *Ganilh*, *Théorie de l'Economie politique* I, 133, calls the knowledge, talents and probity of merchants, as well as their reputation, valuable parts of their capital in trade. See, also, *Möser*, *Patriot. Ph.* II, 26, See some happy observations on the intellectual capital of nations, as consisting of "known and unknown preparatory labor through their history," in *Lotze*, *Mikrokosmos* II,

Another prominent economist of the older German Historical School, Bruno Hildebrand, also criticises Smith's materialism and writes,

Finally, Smith knows only one type of capital, the physical and external capital. Besides this, there is another which is at least as important or even more important; spiritual capital. ... (Hildebrand, 1842, p. 33, my translation)<sup>242</sup>

Hildebrand also writes that it is the moral powers that made Britain great, and as science and intelligences, they constitute an invisible power that cannot be measured. Furthermore, he writes that next to intelligence, the sense of duty and the willpower of the individual are the most important moral powers (Cf. Hildebrand, 1842, p. 301 ff).<sup>243</sup>

This spiritual power and -capital cannot be created from 'above'; it can only ripen slowly with the hard-won experience of a people,

---

353 seq. (Roscher's note)

<sup>241</sup> What Roscher describes here is what we today term 'public goods' (Cf. chapter 6, and the section, *Public goods*).

<sup>242</sup> The original text in German: „Endlich kennt Smith nur eine Kapitalart, das physische, äußerliche Kapital. Neben diesem gibt es aber noch ein wenigstens ebenso wichtiges oder noch wichtigeres geistiges (42) Kapital.“ I owe this reference to Hildebrand, to Prof. Bertram Schefold, Frankfurt a.M.

<sup>243</sup> Hildebrand's text in German is this: „Diese sittliche Kraft, welche dem alten Rom fehlte und welche im heutigen Britannien die Nation groß gemacht hat, ist freilich keine sinnlich wahrnehmbare GröÙe. Ihr Umfang und ihre Intensität können weder durch Beobachtungen ermittelt, noch durch Experimente gemessen werden. Sie ist wie die Wissenschaft und die Intelligenz eine unsichtbare Macht, die in den Herzen und in den Gesinnungen der Menschen lebt und nur in ihren Wirkungen auf das Pflichtgefühl und die persönliche Willenskraft der einzelnen Individuen erkennbar wird, aber sie muß deshalb nicht minder als der wichtigste Faktor neben (141) der Intelligenz im ökonomischen Völkerleben anerkannt werden. Sie, die durch den Grundsatz des „laissez faire“ und durch die Hypothese der Naturgesetze beseitigt werden sollte, ist gerade die Seele jedes gesunden nationalökonomischen Volksorganismus.

Wie die Intelligenz die Fähigkeit und die Macht des Menschen vergrößert, durch geringeren Aufwand von Kräften größere nationalökonomische Resultate zu erreichen, ebenso steigert die öffentliche Moral nicht nur den Fleiß, den Unternehmungsgeist und die Ausdauer in der Arbeit, sondern auch die Gewissenhaftigkeit in der Pflichterfüllung, das gegenseitige Vertrauen, den Kredit und die Opferbereitwilligkeit für das gemeinsame Beste. Sie hebt den einzelnen Menschen aus seiner beschränkten egoistischen Welt auf den höheren Standpunkt des öffentlichen Gemeinwohls, gibt ihm ein Bewußtsein über den Zusammenhang seines speziellen Berufs mit der nationalen Arbeit und verleiht dadurch seiner ganzen Tätigkeit höhere Zielpunkte und eine höhere Weihe, durch die wiederum seine Berufsfreude und seine Leistungsfähigkeit wächst.“ (Hildebrand, 1842, p. 300)

But of course, this moral power will be created neither by governmental measures nor by economic institutions. It is a spiritual capital of peoples, which is laboriously acquired only through hard work. It is the slow-ripening fruit of a large experience-rich history; of an intense national cultural and political life of an ordered and free State life. (Hildebrand, 1842, pp. 300-301, my translation) <sup>244</sup>

In Olli Turunen's *Immaterial capital: ideas of human and social capital in the Older Historical School of German Political Economy*, he briefly mentions Friedrich List as one starting point for his graduation thesis, and claims that List saw skills and acquired abilities as the most important components of a nation's stock of capital,

Did Wilhelm Roscher (1817–1894), Bruno Hildebrand (1812–1878), and Karl Knies (1821–1898) develop Smith's thoughts further or is there to be found original contributions to modern thought?

More to this, since already Friedrich List (1789–1846), an important forerunner of the Historical School seen sometimes as its founder, placed community over individual, though only insofar as it advanced the success of individual, it is interesting to see what aspects of the contemporary and at the moment very trendy social capital theory are included in the works of Roscher, Knies, and Hildebrand. In addition, for List human skills and acquired abilities of human beings were the most important components of a nation's stock of capital.<sup>4</sup> Thereby, the List's statement: "the power to create riches is indefinitely more important than the riches themselves," will serve as a second starting point for this study. (Turunen, 2007)

The most prominent economist of the younger German Historical School, Gustav von Schmoller, seems to intensify the focus on immaterial productive forces. In his major work, *Grundriss der Allgemeinen Volkswirtschaftslehre* ('Foundations of General Economics'), he starts off the almost 1400 pages with a 75 page discussion of the immaterial foundations of economics, regarding issues such as language, writing, morality, customs, and law. He also focuses very explicitly on the immaterial aspects of capital. In a later chapter on *Fortune, capital and credit*, he discusses the historical- and conceptual details of 'Capital' at great length. Schmoller begins in this way,

So we ask first, how did capital come into being ...

On the one hand, people had to think ... on the other hand, they had to make technical advances ... This was first of all of a question of creating certain abilities, a slow process of education; .... The ablest, brightest, and

---

<sup>244</sup>The original text in German: „Aber freilich kann diese sittliche Macht weder durch Regierungsmaßregeln noch durch ökonomische Institutionen geschaffen werden. Sie ist ein geistiges Kapital der Völker, das nur durch lange harte Arbeit mühsam erworben wird, sie ist die langsam reifende Frucht einer großen erfahrungsreichen Geschichte, einer intensiven nationalen Kultur und eines fest geordneten freien Staatslebens.“ (Hildebrand, 1842, p. 301ff)

strongest accumulated large inventories, created better means of production.

They advanced most rapidly to the fore, if they simultaneously could organise better than others both martially and politically, to protect themselves against enemies of all kinds. They achieved much more if they earlier than others learned working together ... and developed the forms and institutions in which this happened. With ascending culture, organisation became a principal means of increasing supplies, and making more effective means of production.

The economic and technical as well as the organizational excellence of families and tribes mainly became the inheritance of their descendants, for centuries and millennia; ... (Schmoller, 1923, pp. 187-188, my translation)<sup>245</sup>

It is clear, from this quotation alone, that Schmoller in his analysis of 'Capital' not only focuses on the ability to think as such, but also on its derivatives such as; co-operation, organisation and institutionalisation – all of which were issues close to the heart of Friedrich List in his considerations of the same issue. Furthermore, like Adam Müller, List, and Hildebrand, Schmoller also brings up the historical aspect of accumulated knowledge. They seem to form links in a common chain.

Also Max Weber and Werner Sombart chose to focus on the immaterial aspects of capitalism, e.g. with Weber's *The Protestant Ethic and the Spirit of Capitalism* (Cf. Weber, 1904) and Sombart's 'The Citizen – the Spiritual History of the Modern Businessman' (Cf. Sombart, 1913). The motivational factors here exposed, was a field where List excelled.

#### **4.17 Marx's orthodoxy – algebra of exchange value**

The German born Karl Marx early on showed attempts at a more dynamic and Idealist view of economic development. In his *Foundations* (*Grundrisse*), Marx writes,

---

<sup>245</sup> The original text in German is: „Wir fragen also zuerst, wie entstand das Kapital ...

Die Menschen mußten einerseits denken, ... sie mußten andererseits technische Fortschritte machen, ... Es handelte sich zunächst bei all dem um die Ausbildung bestimmter Eigenschaften, um eine langsamen Erziehungsprozeß; .... Die fähigsten, klügsten, kräftigsten sammelten größere Vorräte, schufen bessere Produktionsmittel. Sie kamen am raschesten voran wenn sie zugleich kriegerisch und politisch organisiert, sich gegen Feinde aller Art besser als andere schützen konnten. Sie erzielten viel mehr, wenn sie früher als andere das Zusammenarbeiten mehrerer ... erlernten und die Formen und Institutionen, in welchen das geschah, ausbildeten. Diese Organisation wurde mit steigender Kultur ein Hauptmittel, die Vorräte zu häufen, die Produktionsmitteln ergiebiger zu machen.

Die wirtschaftlichen und technischen wie die organisatorischen Vorzüge der Familien und Stämmen blieben meist jahrhunderte- und jahrtausendlang das Erbe des Nachkommen; ... “ (Schmoller, 1923, Vol. II; Book 3, chapter 5, § 182c, pp. 187-188)

But to the degree that large industry develops, the creation of real wealth ... depends rather on the general state of *science* and on the progress of *technology*, or the application of this science to production. (Marx, 1858, p. 704)

In his classic *The Restructuring of Social and Political Theory*, Richard Bernstein accordingly comments that,

If we take this suggestion seriously – and grasp the extent to which Marx’ prediction had been realized in contemporary technological societies – then, at the very least, the original Marxist critique of political economy needs radical revision. (Bernstein, 1976 p.183)<sup>246</sup>

Marx left this venue, and in general deals with the concept of Capital and growth in quite orthodox ways. Concerning the value of goods, Marx follows the Smithian tradition of focusing on exchange value only,

The progress of our investigation will show that exchange-value is the only form in which the value of commodities can manifest itself or be expressed. (Marx, 1867, Vol. 1, Ch. 1)

Likewise, Marx’ contemporary Wilhelm Roscher writes that Marx’ limits his study of Capital to monetary expressions,

*Marx* makes a very arbitrary assertion when he says that only the capital operating in trade, and even only that operating in trade where money is used as the instrument of exchange, can properly be called capital; and that therefore, the modern biography of capital dates back only from the 16th century, (Das Kapital I, 106 ff.) (Roscher, 1877, § 42, p. 152)

Roscher argues that an evaluation of productiveness must be based on a notion of imbedded value,

It is clear that every political economist must construct his exposition of productiveness on his prior notions of goods and value. (Roscher, 1877, §48)

---

<sup>246</sup> Richard Bernstein discusses the ‘neo-Marxist’ ‘Frankfurter School’ and Max Horkheimer in particular, and adds, “For this change affects all those concepts which Horkheimer claims form a “conceptual whole,” especially the absolutely central one of surplus value. But we do not find in Horkheimer any attempt to begin the type of detailed revision that such as changed historical situation requires.”

Bernstein indicates that when these Marxists were confronted with the inadequacies of Marxist economics, they took refuge in discussions over culture; “It is not surprising that Horkheimer and other central Frankfurt thinkers became less and less interested in a systematic development of an historical relevant critique of political economy, and more interested with the critique of ideology in its variety of expressions.” (Bernstein, 1976 p.183) This so-called ‘Critical Theory’ has been labelled ‘Cultural Marxism’ by US Conservatives, relating it to ‘Political Correctness’.

Roscher furthermore argues that exchange value only has an interest for private agents and not for the nation, since it would leave out many “important elements” which a nation must consider “because locomotive of the economy of the nation”,

It has often been made a question, whether the valuation of resources should be based on the value in use, or the value in exchange of their constituent parts. ... The latter has of course no interest, except in so far as we are concerned with ... estimating the value of private resources, ... A valuation, therefore, based on value in exchange, however interesting it might seem to be to enable us to determine how property is shared by the different classes and persons that compose the nation, would afford but little information concerning the absolute amount of national wealth. This of course, applies in a much higher degree to the resources of the whole world.

If now, we were to estimate the resources of an entire people or even the world, by summing up the value in exchange of their several component parts, many very important elements would be left out of the account entirely; as for instance, harbors, navigable streams, numberless relations which have, indeed, no relation in exchange whatever, but which are of the highest importance, because locomotive of the economy of the nation. (Roscher, 1877, § 8)

Since Marx insists on dealing primarily with exchange value, he may thereby be classified as an economist within the ‘mercantile’ Smithian tradition, as opposed to ‘political economy’ dealing with the needs of a nation.

It is interesting but perhaps not very surprising to note that Marx seems to have followed the “orthodox” road and its materialist stance also in his discussions of ‘capital’: In the whole of the three volumes of *The Capital*, Marx does not once mention the concepts ‘human capital’, ‘intellectual capital’, ‘mental capital’, or ‘spiritual capital’. When he does mention ‘social capital’, the meaning is purely material and equivalent with the total capital of a society. For Marx, Capital accumulation tends to be an exercise in algebra, in the ‘mercantile’ exchange-value tradition.

Roscher claims that other socialists followed in Marx’ footsteps by also regarding Labour only from the materialist point of view,

Many of the socialists take a retrograde step in this respect, inasmuch as they consider only manual labor productive. (Roscher, 1877, § 51n, p. 176n)

#### **4.18 The Austrian School – Mises on the human mind and Capital**



List criticised Smith for his abstract way of dealing with economics,<sup>247</sup> as when he argues that Smith dealt with ‘capital’ only from an exchange-value point of view. In other words, Smith dealt with capital as would a shopkeeper and accountant, and not as a national political economist should. List claims that Smith’s generalisations would lead to gross misunderstandings of how an economy works, and with disastrous results.<sup>248</sup>

List is in his reasoning also indirectly supported by two Liberal Austrian-Americans. Ludwig von Mises in 1940 published his major work *Human Action. A Treatise on Economics*.<sup>249</sup> Mises’ book is written very much in the tradition of List, Hildebrand, Schmoller and Steiner in his, relatively speaking - regarding economists, focus and emphasis on methodology and on the realm and importance of ideas. For instance, Mises argues that only the human mind is the source of creativity and production,

Only the human mind that directs action and production is creative. The mind too appertains to the universe and to nature; it is a part of the given and existing world. To call the mind creative is not to indulge in any metaphysical speculations. We call it creative because we are at a loss to trace the changes brought about by human action farther back than to the point at which we are faced with the intervention of reason directing human activities. Production is not something physical, material, and external; it is a spiritual and intellectual phenomenon. Its essential requisites are not human labor and external natural forces and things, but the decision of the mind to use these factors as means for the attainment of ends. What produces the product are not toil and trouble in themselves, but the fact that the toiling is guided by reason. The human mind alone has the power to remove uneasiness.

As noted above, the Austrian-American Joseph Alois Schumpeter argues that Smith’s analysis only looks less abstract, but in reality Smith’s “reasoning is not less abstract than ... Ricardo’s” (Schumpeter, 1954, p. 538n).<sup>250</sup>

Ludwig von Mises argues that the (general) concept of ‘capital’, as used among economists, is an immaterial fiction, which only serves as a tool for calculations. Furthermore, it is only effective to the degree that men allow themselves to be guided by accounting, alone - we might add.

---

<sup>247</sup> Cf, e.g. chapter 3, in the section, *Generalisation and abstraction*.

<sup>248</sup> Cf, e.g. chapter 3, in the section, *Differentiate kinds of capital – and labour*.

<sup>249</sup> Or as the original was called in German; *Nationalökonomie. Theorie Des Handelns und Wirthschaftens* (meaning; *National Economics. Theory of Trade and Business*).

<sup>250</sup> For a more extensive quotation, see chapter 3, in the section, *Generalisation and abstraction*.

More specifically, Mises argues that action is guided by ideas and hence by leaders who are empowered by ideologies. Power is therefore a spiritual phenomenon,

... Action is always directed by ideas; it realizes what previous thinking has designed.

If we hypostatize or anthropomorphize the notion of ideology, we may say that ideologies have might over men. Might is the faculty or power of directing actions. ... Only ideologies can convey to a man the power to influence other people's choices and conduct. One can become a leader only if one is supported by an ideology which makes other people tractable and accommodating. Might is thus not a physical and tangible thing, but a moral and spiritual phenomenon. (Mises, 1940, p. 176)

Following this line of thought, in the chapter *Accumulation, Maintenance and Consumption of Capital*, Mises starts by arguing that 'Capital' is nothing but a conceptual tool to guide action,

Capital goods are intermediary products which in the further course of production activities are transformed into consumers' goods. All capital goods, including those not called perishable, perish either in wearing out their serviceableness in the performance of production processes or in losing their serviceableness, even before this happens, through a change in the market data. There is no question of keeping a stock of capital goods intact. They are transient.

The notion of wealth constancy is an outgrowth of deliberate planning and acting. It refers to the concept of capital as applied in capital accounting, not to the capital goods as such. The idea of capital has no counterpart in the physical universe of tangible things. It is nowhere but in the minds of planning men. It is an element in economic calculation. Capital accounting serves one purpose only. It is designed to make us know how our arrangement of production and consumption acts upon our power to satisfy future wants.

The intention of preserving the available supply of capital goods in full power or of increasing it could also direct the actions of men who did not have the mental tool of economic calculation. ... (Mises, 1940, p. 476)

The general concept of 'capital' is only effective to the degree that men allow themselves to be guided by accounting,

Conceptual realism has muddled the comprehension of the concept of capital. It has brought about a mythology of capital. ...

An existence has been attributed to "capital," independent of the capital goods in which it is embodied. Capital, it is said, reproduces itself and thus provides for its own maintenance. Capital, says the Marxian, hatches out profit. All this is nonsense.

Capital is a praxeological concept. It is a product of reasoning, and its place is in the human mind. It is a mode of looking at the problems of acting, a method of appraising them from the point of view of a definite plan. It determines the course of human action and is, in this sense only, a real factor. It is inescapably linked with capitalism, the market economy.

The capital concept is operative as far as men in their actions let themselves be guided by capital accounting. ... (Mises, 1940, p. 477)

Fritz Machlup was an Austrian student of Ludvig von Mises, and continued this line of inquiry, developing it into knowledge and information economics.<sup>251</sup>

#### 4.19 Growth theory – thought as the lacking source

In their article, *Exploring the genesis of economic innovations*, Erik S. Reinert and Arno M. Daastøl describe how the understanding of growth and development gradually has improved,

Starting from a capital-centered view of growth, the economics profession has moved through various layers of explanations - unknowingly approaching the understanding of economic growth much in the same way one would peel an onion, ever finding a new issue once the previous issue had been brought into view. Very early theories of development tended to focus on geography and climate. In the neo-classical tradition *capital*, of course, is the main factor which virtually alone was supposed to account for the growth process. Schumpeter once referred to this as ‘the pedestrian view that it is the accumulation of capital *per se* that propels the capitalist engine’<sup>252</sup>. Outside the mainstream human creativity, in the form of *entrepreneurship*, was studied. Also here, in the atomistic tradition of modern economics, focus was mostly on individuals, not on society or its institutions.

In the late 1960’s focus shifted to *technology*. An early and important book in this tradition was David Landes’ *The Unbound Prometheus* <sup>253</sup>. Technology is normally seen as consisting of two parts, a ‘hard’ part - the tool or machine - and a ‘soft’ part - human knowledge. For a long time, the study of technology concentrated on the ‘hardware’, the machine. Implicitly, knowledge was seen in the light of neo-classical ‘perfect information’, and therefore not important to technological change. Consequently ‘technology transfer’ came to be seen as a transfer of hardware, of machinery, while little attention was paid to human knowledge. Knowledge was seen to be ‘codified’ - as in instruction booklets - and easily transferred. This is the formal and static interpretation of knowledge, as opposed to an alternative view which is more tacit, intuitive, and creative.

As a next step the entrepreneur and the machine came to be seen as part of a *system* which continuously created innovations - a ‘National Innovation System’<sup>254</sup>. This brand of evolutionary or Schumpeterian approach got its ‘seal-of-approval’ by the establishment through a large OECD programme,

---

<sup>251</sup> See the section above, *Knowledge and information economics*.

<sup>252</sup> Schumpeter, Joseph A. *History of Economic Analysis*, New York, Oxford University Press, 1954, p. 468. (Reinert and Daastøl’s note)

<sup>253</sup> Cambridge, Cambridge University Press, 1969. (Reinert and Daastøl’s note)

<sup>254</sup> Lundvall, Bengt-Åke (ed.), *National Systems of Innovation*, London, Pinter, 1992, and Nelson, Richard (ed.), *National Innovation Systems*, New York, Oxford University Press, 1993. (Reinert and Daastøl’s note)

'Technology and Economy', which was finished in 1992.<sup>255</sup> The layer which required understanding after 'the machine' - the hardware of technology - was 'knowledge'. Slowly the concept of *knowledge* itself was brought into focus - and the importance of 'tacit' or uncodified knowledge was acknowledged. (Reinert and Daastol, 1997)

Reinert and Daastol are a bit off the mark here, since even in the early 1960s and including the USA, several economists pointed to the intangible factors of knowledge and education as the main driving force of growth (Schultz, 1963, Becker, 1963, and Machlup, 1964). There was also discussion along these lines in the early 1950s, such as in Norway's Ministry of Finance (Cf. "Group", 1952).

Moreover, economic scholars in the German Language area were of course no strangers to such ideas, which had been debated without interruption since before the time of Müller and List (Cf. e.g. Hildebrand, 1848; Roscher, 1877; Schmoller, 1900; Mises, 1940; Eckert, 1963).

We will now look briefly at the development of such ideas of intangible factors in the USA, since this is what most of academia today remembers,

In the tradition of Mercantilism and also the English Classical School, as well as the post WW II period, generally speaking, the fundamental task of the economic science has been to promote material growth.<sup>256</sup> Distribution and other issues have been seen as secondary to this task, although of course related. Growth has been defined as increased production, and therefore determined by what is productive.

It has been common practice to consider economic growth as a result of in particular two factors: Labour and capital, but often with nature/land added as a third factor. This makes it possible to quantify a theory if one also assumes that each factor is homogenous, which of course is the opposed to Malthus and Ricardo's basic argument concerning land. This is of course in general not true either, but it is a convenient simplifying tool in order to bring forward and highlight some points of argument.

A problem it is, however, that this insistence on measurement as the prime tool blurs other important points, and in particular the role of thinking, which only to a small degree is quantifiable.

Increasingly economists have realised that technological progress is a key factor in promoting and explaining economic growth. Human thought is the main factor behind technological progress, but textbooks

---

<sup>255</sup> OECD, *Technology and Productivity. The Challenge for Economic Policy*, Paris, OECD, 1991, and *Technology and the Economy. The Key Relationships*, Paris, OECD, 1992. (Reinert and Daastol's note)

<sup>256</sup> That the fundamental task was seen differently in other countries is a matter we shall leave alone here, and restrict ourselves to note that Friedrich List was part of a tradition, where material growth only was one tool to a greater goal, namely the progress of civilisation. List view here corresponds e.g. with that of his contemporary in Norway, Prof. Anton Martin Schweigaard (1808-1870).

have indeed dealt poorly with it. Robert Heilbroner writes in 1989 about human capital in individualistic terms,

... our human capital of skills and knowledge. In the long run this is probably the ultimate source of a country's productivity and inventiveness -... (Heilbroner, 1989, p. 217)

As an indication of the difference between academic textbook economics and business in practice, the following document may be of interest. In the summary of Stefan Bergheim's 2005 report for Deutsche Bank Research, *Human capital is the key to growth, Success Stories and Policies for 2020*, he writes that,

- Many of the growth stars identified in our introductory study "Global Growth Centres 2020" owe their success to solid gains in human capital – especially India, China, Thailand and Spain.
- Our empirical investigation supports the view that human capital is the most important factor of production in today's economies. Increases in human capital are crucial to achieving increases in GDP. The best available proxy for human capital is the average years of education of the population aged 25 to 64. (Bergheim, 2005)<sup>257</sup>

Wealth and its growth have normally been seen as related to consumption, of food, houses, cars, etc. Such measurements say nothing of the reasons behind wealth and growth, or of whether they are sustainable. This was indeed one of List's main criticisms of the Smithians, that they mistook nominal wealth ('exchange values') for the ability to produce them ('productive force'). List pointed to the role of what we may term technology, read large – encompassing also 'cultural technology', such as discipline, law, administration, language, grammar.

Relating economic growth to technological progress gives us an opportunity for a better definition of growth. Growth can be seen as the increased power to manipulate nature to satisfy the needs of mankind for physical survival. The result could be measured in the potential human density per area of land.

I will use standard and classic textbooks to visualise the academic treatment of the growth issue and more specifically the human capital issue and the issue of technological improvement. Newer textbooks do offer more details and insight into these issues, but only slightly so.

Dornbusch and Fisher make no effort to define the concept of growth other than as output in a monetary unit, in US dollars (Dornbusch and Fischer, 1978, ch. 17: *Long term Growth*, pp. 548 ff). They write,

Growth theory asks what factors account for the increase in output over time, and what behavior an economic system will show along the growth path of full-employment output. (Dornbusch and Fischer, 1978, p. 549)

---

<sup>257</sup> The second half of this quotation is repeated in the section on education.

They explain the causes of growth in this way in the section *Sources of Growth in Real Income: Theory*,

What are the sources of growth in real output over time? The simple answer is: First, growth in the availability of factors of production and, second, improvements in technology. (Dornbusch and Fischer, 1978, p. 551)

In the subsequent section, *Sources of Growth*, they write about accumulation of material capital,

We have seen that growth in the amount of capital per head increases the output per head. One of the sources of long-term growth in output per head is that capital has grown faster than labor and therefore has caused the capital-labor ratio to rise. ....

An improvement in technology would mean that we can produce with the same amount of capital per head a larger quantity of output per head. Our second source of growth is therefore improvement in technology, or technological progress. ... Growth in capital per head and technology are the only sources of growth in output per head. (Dornbusch and Fischer, 1978, pp. 553-555)

In essence, 'improvement in technology' or 'technological progress' is synonymous with 'capital improvement' - that a given "amount" of capital has been qualitatively improved and / or replaced by qualitatively better capital. In other words, a quantitative approach does not tell the whole story. However, by how much are we off the mark if we stick to the quantitative approach alone?

In his *Resource and Output Trends in the US since 1870*, Moses Abramowitz showed in 1956 that capital accumulation accounted for some 10-15 % of US economic growth (Abramowitz, 1956).

'Nobel' Laureate Robert Solow published in 1957 the MIT study *Technical Change and the Aggregate Production Function*. Solow does not define technological progress, but in the conclusion, Solow writes that technical progress accounts for 87.5 % of economic growth, and that there is a slight degree of diminishing returns,

Among the conclusions which emerge from a crude application to American data, 1909-49, are the following:

1. Technical change during that period was neutral on average.
2. The upward shift in the production function was, apart from fluctuations, at a rate of about one per cent per year for the first half of the period and 2 per cent per year for the last half.
3. Gross output per man hour doubled over the interval, with 87,5 per cent of the increase attributable to technical change and the remaining 12 ½ per cent to increased use of capital.
4. The aggregate production function, corrected for technical change, gives a distinct impression of diminishing returns, but the curvature is not violent. (Solow, 1957, p. 320)

What Solow referred to as technical progress was often referred to as ‘the Solow residual’ of 87.5 %, or simply the ‘residual’. This phenomenon was duly noticed also in the textbook literature. Dornbusch and Fischer write in 1978,

An early and famous study by Robert Solow of MIT dealt with the period 1909-1949 in the United States.<sup>258</sup> Solow’s surprising conclusion was that over 80 percent of the growth in output per man hour over that period was due to technical progress, that is, to factors other than growth in the input of capital per man hour. (Dornbusch and Fischer, 1978, p. 556)

A more recent view from 2002 elaborates the issue somewhat. Discussing the Solow model N. Gregory Mankiw<sup>259</sup> writes, in the fifth edition of his textbook *Macroeconomics*,

With the addition of technological progress, our model can finally explain the sustained increases in standards of living that we observe. That is, we have shown that technological progress can lead to sustained growth in output per worker. By contrast, a high rate of saving leads to a high rate of growth only until the steady state is reached. Once the economy is in steady state, the rate of growth of output per worker depends only on the rate of technological progress. According to the Solow model, only technological progress can explain persistently rising living standards.

The introduction of technological progress also modifies the criterion for the Golden Rule. The Golden Rule level of capital is now defined as the steady state that maximizes consumption per effective worker. (Mankiw, 2002, p. 214)

Solow and Mankiw thereby claim that technological progress is the only long-term factor that can promote growth. In spite of this, Mankiw then only uses seven sentences (out of a book of 462 pages) on the chapter *Encouraging Technological Progress*, to explain how technological progress can be promoted. Mankiw writes,

The Solow model shows that sustained growth in income per worker must come from technological progress. The Solow model, however, takes technological progress as exogenous; it does not explain it. Unfortunately, the determinants of technological progress are not well understood.

Despite this limited understanding, many public policies are designed to stimulate technological progress. Most of these policies encourage the private sector to devote resources to technological innovation. For example, the patent system gives a temporary monopoly to inventors of new prod-

---

<sup>258</sup> 4: Technical Change and the Aggregate Production Function,” *Review of Economics and Statistics*, August 1957. (Dornbusch and Fischer’s note)

<sup>259</sup> N. Gregory Mankiw is one of the world’s most influential economists (actually ranked 22<sup>nd</sup>, above US Federal Reserve President Ben Bernanke, Cf. RePEc, 2011). He has written one of the most used text books in economics, «Principles of Economics», sold in over one million copies (Mankiw, 1998). From 2003 til 2005 he was the Chairman of US President’s G.W. Bush’s *Council of Economic Advisors*.

ucts; the tax code offers tax breaks for firms engaging in research and development; and government agencies such as the National Science Foundation directly subsidize basic research in universities. In addition, as discussed above, proponents of industrial policy argue that the government should take a more active role in promoting specific industries that are key for rapid technological progress. (Mankiw, 2002, p. 189)

Moreover, in spite of human thought and science being the obvious forces behind technological progress, not a word is written on the issue by e.g. Mankiw. What motivates thought (including innovation of course) ought to be the core theme of economic growth theory, and economics as such, but today this core theme is totally absent in economics. Some space is given to an offspring of thought, namely technological progress, but in the core literature even this is treated rather haphazard, as in Mankiw's seven sentences out of 462 pages. Dornbusch and Fischer's textbook is not any better, and indeed symptomatically the authors are more interested in the model than in the real world: They spend one page discussing the effects of technological progress on the model as opposed to discussing technology in the real world. The reasons for technological progress, is obviously of no interest.

In his classic *Phases of Capitalist Development*, the OECD-expert Angus Maddison writes,

Technological progress is the most essential characteristic of modern growth and the one that is most difficult to quantify or explain. (Maddison, 1982, p. 56)

The difficulty in quantifying technological growth may explain the ignorance in standard economic textbooks about technological growth.

By looking at thought as a production factor, we would achieve a closer connection to other sciences and to philosophy, and achieve wider perspective and more closeness to goal and meaning in economic policy. Looking at the above quotation from Mankiw, and even more so the work of Dornbusch and Fischer, it seems that a lot is to be learned about growth, by reading Friedrich List's 170-180 year old works who focuses precisely on these ignored issues. That List has been ignored for so long in this field, in spite of his main work having been translated also into English in Britain (1884, 1904, and 1928) and the USA (1856), certainly leaves something to be explained.

List addresses the issue of technological progress directly and indirectly when discussing the confederation of labour ('national teamwork') and by discussing what he calls 'Capital of Mind'.

#### **4.20 National innovation systems - based on mental capital**

Starting around 1990, a group of researchers in the industrialised countries called for 'national innovation systems' to be developed more



consciously in order to promote technological and thereby economic growth (Freeman, 1982, 1987 and 1995; Lundvall, 1992; Nelson, 1993; Edquist, 1997, Miettinen, 2002)

This reached perhaps its peak with the OECD report in 1997: *National Innovation Systems* (OECD, 1997). This was much inspired by similar attempts in Japan and other Asian countries. However, we shall see below, the inspiration was far older than this and closer to home.

In essence, a 'national innovation system' means an active network that promotes technical innovation through a flow of technologically related information among people, enterprises and institutions like universities and government research institutes. Bengt-Åge Lundvall, one of the originators of the theory, writes that Freeman by referring to List established a connection between innovation theory and development theory,

### 1.1. The Origin of the Concept

The innovation system concept was developed in parallel at different places in Europe and in the USA in the 1980s. There is no doubt that the collaboration between Christopher Freeman and the IKE group in Aalborg at the beginning of the 1980s was important in coining and shaping the earliest versions of the concept (Freeman, 1982; Lundvall, 1985) but the basic ingredients and the inspiration may be found in the work of many other innovation scholars at the same time and even earlier.

Freeman brought deep understanding of innovation processes, historical insight and wisdom to the collaboration. His reference to Friedrich List in his 1982 paper was crucial since it linked the concept to catching-up processes. (Lundvall, 2007)

Freeman introduces his 1982 paper such,

The paper is probably the first written paper using the concept of 'the national innovation system'. ... The analysis is rooted in historical context through references to Friedrich List and his criticism of Adam Smith and laissez-faire. (Cf. Freeman, 1982, preface, p. 2)

Lundvall also points to List as an early predecessor of 'national innovation systems' due to his emphasis on 'national production systems' wherein 'mental capital' played the key role. He furthermore points out that the originator of the concept of 'national innovation systems', Freeman, wrote about it while inspired by List. Lundvall points out that important elements of modern theory came from research on development issues. Lundvall writes,

### 5.2. Common Roots

The history and development of the concept of "national system of innovation" indicates that it can be useful for analysing less developed economies. Some of the basic ideas behind it go back to Friedrich List (List, 1841a) and they were developed as the basis for a German "catching-up" strategy. His concept of "national systems of production" took into account

a wide set of national institutions including those engaged in education and training as well as infrastructures such as networks for transportation of people and commodities (Freeman, 1995b).

List's analysis focused on the development of productive forces rather than on allocation issues. He was critical and polemic to the "cosmopolitan" approach of Adam Smith, where free trade was assumed always to be to the advantage of the weak as well as the strong national economies. Referring to the "national production system", List pointed to the need to build national infrastructure and institutions in order to promote the accumulation of "mental capital" and use it to spur economic development rather than just to sit back and trust "the invisible hand" to solve all problems. It was a perspective and a strategy for the "catching-up" economy of early 19th-century Germany.

The first written contribution that used the concept "national system of innovation" (Freeman, 1982), "Technological Infrastructure and International Competitiveness", was written very much in the spirit of Friedrich List, pointing out the importance of an active role for government in promoting technological infrastructure. It also discusses in critical terms under what circumstances free trade will promote economic development.

It is also interesting to note that while the modern version of the concept of national systems of innovation was developed mainly in rich countries (Lundvall, 1992; Nelson, 1993; Edquist, 1997) some of the most important elements in the concept actually came from the literature on development issues in the Third World. (Lundvall, 2007)

However, List, as could be expected, was not the first person who thought along these lines. Although neither he was the first, but nevertheless already Leibniz called for a national program for the elevation of arts and handicrafts, meaning knowledge and industry, modelled on Richelieu's *Académie française* for the promotion of the French language (formally from 1635) and then Colbert's *Académie des sciences*, established 1666 (Leibniz, 1671a). Leibniz was later instrumental in founding the Academies of Berlin and St. Petersburg.

In the republishing of Freeman's 1982 article in 2003, Lundvall writes in the preface that Freeman saw List's main contribution to be his emphasis on infrastructure and 'mental capital',

To the best of my knowledge it is the first written contribution that uses the concept national system of innovation (see below on p. 9). It is interesting to note that he put national in italics in the original text and if anything that indicates that the innovation system had already become an everyday concept for him.

But more remarkable than the fact that this is the richness of the context in which the concept appears. Many of the points that current research on innovation systems are focusing on are already raised and the contours of the full-blown concept are already to be seen in this paper. ...

Also in terms of policy conclusions the paper is very rich. It starts from List's criticism of Adam Smith and it shows that the most important contribution by List was not his protectionist proposals but rather the emphasis put on governmental initiatives to build 'infrastructure' and invest in 'mental capital'. It opens up what is certainly a very controversial possibility in

the OECD-context that free trade might not be to the advantage of weak players. Finally it points to the need for policy co-ordination across policy fields, including technology and industrial policy. (Freeman, 1982, preface, p. 2)

Lundvall is, however, slightly wrong. Freeman did not write that List's most important contribution was the emphasis on 'infrastructure' and 'mental capital'. Rather Freeman writes that "the central feature" was "the mental capital' and productive powers of the nation".

... the central feature of List's doctrine was his belief that economic progress depended on building up the 'mental capital' and productive powers of the nation. This depended in turn on the capacity to assimilate and use all the discoveries, inventions and improvements which had been made in any part of the world and to improve upon them. ... (Freeman, 1982, ch. 6, p. 16)

But neither is this strictly speaking correct, but it would have been if we exchange the word 'and' with the word 'as': The point being that List saw 'mental capital' as the central feature of the productive powers of the nation. Freeman is more precise when he lists the "fundamental points" in List's strategy, and begins with "(1) The importance of 'mental capital'". Freeman then suggests that,

... 'intellectual capital' might be a better rendering today than the English translation of that time. (Freeman, 1982, ch. 5, p. 14)

List's original expression was *Geistige Kapital*, and the direct translation would be 'spiritual capital'. This would include all kinds of immaterial infrastructure such as language, grammar, morality, work discipline, contract morality, measurement standards, organisational structure, institutions etc. 'Intellectual capital' has a far narrower ring to it and Freeman's suggestion is therefore neither adequate nor good.

List himself lists the following as capital of mind,

Greater part of the productive power consists in the intellectual and social conditions of the individuals, which I call capital of mind. (List, 1827b, p. 192)

164 years after the passing of Friedrich List, and 28 years after Freeman's article, the concept 'Geistiges Kapital' or 'Mental Capital' has still not received a general acceptance. A Google search in May 2010 for the combination of the two "Friedrich List" "Geistige Kapital" produced only 22 hits, and only 13 hits when we changed the grammar slightly to "Geistiges Kapital". The combination of "Friedrich List" and "Mental Capital" produced 77 hits, while "Friedrich List" and "Spiritual Capital" produced 29 hits. Many of these hits referred to the same sources.

In his fifth chapter, *Friedrich List, Laissez-Faire and Mental Capital*, Freeman writes that List "anticipated by more than a century the 'human capital' theories of the neo-classical school",

In particular, the most important and influential economic theorist in Germany, Friedrich List, discussed the British economy in terms highly reminiscent of much contemporary discussion on Japan. He was a powerful critic of Adam Smith on a number of key issues, which are relevant to our analysis: ...

This perversity of surrendering the interests of manufactures and agriculture to the demands of commerce without reservation, is a natural consequence of that theory which everywhere merely takes into account present values, but nowhere the powers that produce them, and regards the whole world as but one indivisible republic of merchants.<sup>260</sup> ...

He accompanied this onslaught on the 'school' by another line of attack in which he anticipated by more than a century the 'human capital' theories of the neo-classical school. ... (Freeman, 1982, ch. 5, pp. 12-13)

Freeman argues that to understand international competition, "We must go to the original source of the national competitiveness school."; read List in the original, and notice that "The fundamental points" are "1. The importance of 'mental capital'" ...,

These arguments of List have been quoted at considerable length for several reasons. First, to convey the flavour and the vehemence of List's onslaught. Secondly, because List is seldom read in the original in these days. Thirdly, and most important, because in these passages are contained the seeds of most of the policies later adopted in Germany (and in other countries trying to overtake established technology and trade leaders. If we are really to understand international competitiveness, then it is of no use to go back to Adam Smith and still less to Ricardo and the 'school' of neo-classical comparative advantage theory, and Michalet has rightly warned against this.<sup>261</sup> We must go to the original source of the national competitiveness school. No doubt, if Adam Smith had been writing two hundred years later he would have been able to find many much better examples of the folly of 'artificial' investment in non-competitive industries than the hypothetical and improbable one of vine-growing in Scotland. No doubt either, as many have observed, that List exaggerated somewhat the extent to which Adam Smith might be criticised for the dogmatism of his followers (the 'school').

Nevertheless, the debate still has a contemporary ring and is echoed today around the whole world, and not only in the industrialising countries of the Third World with their infant and teenage industries.

The fundamental points in List's spirited defence of national competitive strategies were the following:

(1) The importance of 'mental capital' ... (Freeman, 1982, ch. 5)

In 1987, Christopher Freeman published the book, *Technology and Economic Performance: Lessons from Japan* and the chapter, *Technological leadership and trade performance*. In this chapter, he writes that

---

<sup>260</sup> 28: (Freeman's note)

<sup>261</sup> 2. Michalet, C. A. (1981), 'Competitiveness and internationalisation', DSTI/ SPR/ 81.63, OECD, Paris. (Freeman's note)

long-term shift in export shares were not “primarily explicable in traditional price competition theory, but must be explained in other terms.” He then refers to the role of ‘technology’, which had been referred to as the culprit in several sector-by-sector studies, as well as cross-sector studies, but not regarding the success of whole countries, which was a matter of fact. Freeman argues that traditional theory is unable to explain the process, so we have to look elsewhere for help,

Catching up and overtaking established technological leaders could pose formidable problems for imitators and aspirants for leadership, since they must aim at a moving target. ... We must start, not from such unrealistic assumptions deriving from general equilibrium theory, but from the evidence of empirical research on the dynamics of technological competition. The findings of such research are virtually unanimous, ... in pointing to several characteristics of the innovation process, which relate to externalities, to the availability of skills, of external sources of research and development support, to infrastructural investment and other features of the national system of innovation. (Freeman, 1987, pp. 96-97)

Freeman argues that the factors involved have to be treated differently in each country case, and that superior culture established Britain as a leader while having the highest wages, contrary to traditional price theory,

What changes ... is the mode of dealing with these basic characteristics, that is those social changes which permit and stimulate a particular society ...

This point should be understood above all in Britain ... Economic historians are largely agreed that it was superior organisation, technology and machinery which enabled Britain to establish this lead, rather than lower labour costs or the relative prices of labour and capital. In fact British wages were higher ... (Freeman, 1987, pp. 97-98)

Freeman thereby repeats the insights of List,<sup>262</sup> namely that higher productivity based on superior mental capital allows for higher wages, and not only allows it but demands it, since a higher productivity of labour presupposes a higher living standard. Moreover, as Freeman repeats, this is contrary to standard price oriented theories of competition.

Freeman argues that Friedrich List early on understood the problems related to technology gaps and the catching up process,

The explanation of economic development in terms of the opening up of technology 'gaps' and subsequent efforts by other countries to overtake (and surpass) the technological leaders is, of course, not new. It was already made quite explicit by Friedrich List ... (who) had much of interest to say about uneven development. (Freeman, 1987, p. 98)

---

<sup>262</sup> Cf. e.g. List, 1837a, pp. 120-121, and List, 1841a, pp. 202-203, and authors within the tradition of the American System, e.g. Greeley, 1870.

Freeman writes that,

The fundamental points in List's advocacy of national technology strategies were the following:

1. The central importance of 'mental capital' ...
2. The necessity of importing the most advanced foreign ...
3. ... the importance of new investment ... and ... learning by doing ...
4. The importance of skills in the labour force...
5. The importance of the *manufacturing* sector ...
7. Finally, List stressed very strongly the importance of an active national policy in order to promote long-term development, ... (Freeman, 1987, pp. 98-99)

Freeman discusses the differences between German and British management, and claims that by following List's ideas, Germany developed a national education and training system, "a national system of innovation", which made German industry more fitted to modern technical requirements than Britain's.

The ideas advocated by List and his followers were important in the evolution of German economic policies and German approaches to technology. Their first and most important consequence was the early development of an education and training system capable of putting the whole process of acquiring and disseminating world technology on a regular and systematic basis. By the late nineteenth century Germany had developed a 'national system of innovation' which proved superior to the British in terms of the education and training system, as well as the organisation of in-house research and development in the new chemical and electrical industries. (Freeman, 1987, p. 100)

Freeman finishes the chapter by discussing management traditions in several social sectors, and claims that practical focus on quality; design; and longer term strategic thinking was more typical of German society, and even more so of Japanese society,

The German system, on the other hand, was based on thorough and deliberate professional development and on the recognition of *Technik* -design and engineering - as a 'third culture' equal in status to the arts and sciences. This was of the greatest importance for the general 'management culture' in German industry. ...

The type of long-term strategic thinking necessary for long-term success with new technologies was therefore more characteristic of German than of British industry, as well as an insistence on high quality and good design on the technical side. This is even more true of Japanese firms in the most recent period.

The importance of this long-term way of thinking was by no means confined to German industry. It was also extremely important in government (for example, in the finance of research and education, as well as in measures to promote strategic industries) and in financial institutions.

Again, as we have seen in Chapters 2 and 3, this was and is even more important in Japan. . (Freeman, 1987, p. 101)

Freeman's understanding of Germany and Japan as cultures that are particularly oriented towards long term quality is supported and described in greater detail by other authors, such as *Managers and Management in West Germany* (by Peter Lawrence, 1980) and *Confronting Managerialism* (by Robert R. Locke and J.-C. Spender, 2012)

In his *Aspects of Design Policy in History*, Professor John Heskett at School of Design, Hong Kong Polytechnic University, argues that List's specific emphasis on skill and competence was ignored in the US and England and for a long time also in Germany, but around the turn of the 20<sup>th</sup> Century Friedrich Naumann renewed List's emphasis on quality,

List's work has tended to be ignored in Britain and the US, which instead have followed the economic doctrines derived from Adam Smith, emphasising individualism and the market as the defining forces of an economy. In Europe and Asia, however, a different emphasis is evident. In Germany, for example, industrialisation in the late nineteenth century resulted again in much copying and earned for German products a reputation for being cheap and nasty knock-offs. Reacting against this trend, politician Friedrich Naumann published a book in 1906, *Neudeutsche Wirtschaftspolitik* (New German Economic Policy), in which he wrote in terms similar to List:

"One can only trade successfully with good products. The masses must therefore manufacture good products, if they are not to give up on physical and spiritual quality ... The content of this competition is the question: which nation has the best technology, the best forms and the best organization of work and commerce. In other words, where is the highest human achievement becoming a mass phenomenon? ... But higher quality of products is not possible without higher quality of productive power, indeed, of all productive powers."6 (Heskett, 2010, p. 6)<sup>263 264</sup>

Therefore, like List, Naumann claimed that quality production was only possible with a higher quality of Labour itself.

#### **4.21 Confederation of Labour**

Civil Society is part of what List and others termed the Confederation of Labour – which includes both the co-operative aspect of society – as well as the competitive aspect.

Anyone who has taken part in practical production in a company of some kind knows that it demands a co-operative effort, and the quality

---

<sup>263</sup> [6] Naumann, F. (1906), *Neudeutsche Wirtschaftspolitik*, Buchverlag der 'Hilfe', Berlin, p. 20 (Heskett's note)

<sup>264</sup> Quotation marks has been inserted by me to make clear that the last paragraph is a quotation from Friedrich Naumann.

of co-operation determines the quality of the product. An economist interested in production and growth ought therefore to study how to improve co-operation. This is done in modern Management theory and in Sociology of labour and organisation.

It was, however, ignored by the Cosmopolitan School, claims List. It may be fair to regard List as a pioneer in Management theory, preceding e.g. Henri Fayol (1841–1925) by decades, but of course himself being in debt to the Cameralist-Renaissance tradition of Statecraft and management.

List agrees with Smith and Hamilton that division of labour was an important reason for productivity of labour,<sup>265</sup> and he equally agreed that the union of labour - the confederation of labour - was important.

Nevertheless, List also severely criticised Smith for dealing too shortly with the latter side to the coin, namely the confederation of labour, which to List was more important.

The cause of the productiveness of these operations is not merely that division, but essentially this union. (List, 1841a, p. 150)

In 1837 List argues for “the principle of co-operation” of labour of all branches of industry of a nation, and prefers economic growth to be slow and steady, in order to avoid disruptive setbacks,

The fullest development of manufacturing industry, however, will take place only when various branches of industry are so intimately linked that one process can follow another as closely as possible. The principle of co-operation is as indispensable to steady regular industrial growth as the principle of the division of labour.

Experience teaches us that a high degree of civilisation, and the labours of successive generations, are necessary to bring the industrial capacity of a country to a high degree of perfection. To achieve this object a regular - though perhaps a slow - rate of growth both of output and of sales must have first priority. Any step backwards must be avoided at all costs. (List, 1837a, p. 28)

A crucial point of List’s criticism against Smith - related to Smith’s generalisations - was Smith’s one-eyed focus on the role of the division of labour. List applauded Smith’s contribution in this area, but claimed that Smith had forgotten the other side to this phenomenon, namely the union- or confederation of labour, i.e. the co-operation of individuals and institutions (firms, regions and nations) in order to produce a result. This concerns several sub-issues. One issue is the immaterial side: The skill, morality, and insight required to co-operate.

---

<sup>265</sup> Before Adam Smith, the principle of the division of labour and its beneficial effects was discussed for instance by Xenophon, Plato, Sir William Petty, Bernard de Mandeville, David Hume and Henri-Louis Duhamel du Monceau (Cf. e.g. Roscher, 1877).



List only starts to use this expression of the ‘confederation of labour’ in his *National System*, but the concept behind it had been under way for some time. In the *Natural System*, he speaks of the principle co-operation,

The principle of co-operation is as indispensable to steady regular industrial growth as the principle of the division of labour. (List. 1837a, Letter I, p. 28)

List also repeatedly mentions co-operation between agriculture and manufacture and co-operation between consumers and producers, as well as between different branches and different nations. The idea of an organic pulsating whole that constitutes the ‘confederation of labour’ and innovation, seems to arrive later.<sup>266</sup>

The method of the Cosmopolitical School is to promote international trade through national *specialisation* and cultivation of comparative advantages, and thereby promote national dependence on the international market – which England dominated both regarding finance, trade, transport, and not to forget, the navy. Whereas England promoted national dependence (for other nations), List promoted independence. The purpose of List’s strategy was to establish a multifarious *variety* of competitive national industries in order to promote national sovereignty and productive *synergy* between economic sectors, as well as the mentioned stability mentioned above,

The whole social state of a nation will be chiefly determined by the principle of the variety and division of occupations and the cooperation of its productive powers. (List, 1841a, p. 159)

However, to achieve this, small nations had to unite into larger viable units that formed an aggregate within itself,

The arguments of the school in favour of free competition are thus only applicable to the exchange between those who belong to one and the same nation. Every great nation, therefore, must endeavour to form an aggregate within itself, ... (List, 1841a, p. 159)

Grand material achievements are only possible by the intergenerational confederation of labour, List writes,

The importance of this principle becomes still more evident in respect to material achievements.

Individual cities, monasteries, and corporations have erected works the total cost of which perhaps surpassed the value of their whole property at

---

<sup>266</sup> The expression ‘confederation of labour’ is often used in French and in Spanish to denote a the general or national union of workers, such as the old Anarchist union CNT in Spain (Confederation National del Trabajo) and the Socialist union CGT (Confederation General de Travail) in France, both meaning, “General Confederation of Labour”.

the time. They could only obtain the means for this by successive generations devoting their savings to one and the same great purpose.

Let us consider the canal and dyke system of Holland; it comprises the labours and savings of many generations. Only to a series of generations is it possible to complete systems of national transport or a complete system of fortifications and defensive works. (List, 1841a, p. 296)

The concept of a Confederation of Labour has implications for transport and tariff policies. A higher union or confederation of labour requires better communication and co-operation. Geographical proximity between actors furthers better co-operation, and thereby improves synergy between skills, trades and branches. Besides, it may be economical in the sense that it requires less transport and therefore use of resources like time and energy. However, such local confederation of labour may not develop “naturally” and spontaneously, e.g. due to the lack of costly infrastructure, but may require “artificial measures” as macro planning and therefore governmental intervention and restriction of sorts, as with the customs union, the Zollverein. In his *On the Use of the Railway* (Cf. List, 1841c), List describes how the tariff policy and infrastructure mutually support each other in the effort to construct a national confederation of labour,

The railway system and the customs union are Siamese twins; born at the same time, physically attached to one another, of one mind and purpose. They mutually support one another, strive for one and the same great goal, for the unification of the German peoples into one great and cultured, one wealthy, powerful and inviolable nation. Without the customs union a German railway system would never have come up for discussion, let alone have been completed. Only with the help of the German railway system is the cooperative economy of the Germans able to soar to national greatness, and only as a result of this prosperity can the railway system attain its full importance. (List, 1841c, see also the English translation in 1981, p. 183)

In 1841, List similarly argues that the principle of co-operation of individuals in a factory was replicated on a national scale,

The popular school ... has not perceived that the same law extends its action especially over the whole ... economy of the nation. (List, 1841a, p.151)<sup>267</sup>

The principle of division of labour has not been fully grasped up to the present. Productivity depends not only on the division of various manufacturing operations among many individuals, but still more on the moral and physical co-operation of these individuals for a common end.

Thus the principle is applicable not merely to single factories or estates, but to the whole agricultural, manufacturing, and commercial forces of a nation. Division of labour and co-operation of productive powers exist

---

<sup>267</sup> The full quotation of the List’s attack on the “Popular school” and Smith’s shallowness may be found in appendix 1a.

where the intellectual activity of a nation bears a proper ratio to its material production, where agriculture, industry, and trade are equally and harmoniously developed. (List, 1841b, *Introduction*, in Hirst, 1909, pp. 306-307)<sup>268</sup>

In this section, List points out the benefits of proximity for stable production, and thereby the dangers of international dependency, which the world manufacturing system experienced after the earthquake and flood-wave in Japan early 2011,

In like manner the entire manufacturing industry ... will prosper the more the nearer they are placed to one another, and the less they are interrupted in their mutual exchanges with one another. (List, 1841a, p. 151)

List also claims that Smith neglects the fact that this co-operation is most successful where whole districts are devoted to their specialities. List thereby precedes Michael Porter's cluster theory by some 149 years. (Porter, 1990)

Smith had in view only the separate manufactory and the separate farm. He has, however, neglected to extend his principle over whole districts and provinces. Nowhere has the division of commercial operations and the confederation of the productive powers greater influence than where every district and every province is in a position to devote itself exclusively, or at least chiefly, ... (List, 1841a, p. 151)

The different emphasis (of Adam Smith and Friedrich List) regarding division versus co-operation of Labour has important implications. A one-eyed focus on the division of labour may lead the way to "beastly" competition, and may be open to relatively mechanically analysis and biological metaphors - like that of Darwinistic competition drawn from Malthus' model.

Confederation of labour on the other hand, more readily points to human compassionate activity by way of mental activity in the sense of moral reason: The unification of morality and intelligence. This aspect is less open to a mechanical analysis and to biological metaphors.

The focus on the aspect of division and not on union was another factor that made formalisation of economics easier; and more lacking in relevance to real life. In the extreme, formalisation implies a mechanism that runs "frictionless" without the transaction costs and externalities that human beings and institutions involve.

For instance, the French co-founding father of Sociology, Émile Durkheim, argues that the division of labor serves to create social solidarity and that,

---

<sup>268</sup> List thereby precedes the OECD report *National Innovations Systems* by some 160 years (Cf. OECD, 1997).

...the economic services that it can render are insignificant compared with the moral effect that it produces, and its true function is to create between two or more people a feeling of solidarity. (Durkheim, 1893, p.17)

When Durkheim argues that this integrative function is more important than the “narrow” productive aspect, he is also right economically speaking - in a wider understanding of economics. This integrative function is of course of immense value, however immeasurable.<sup>269</sup>

The Russian Anarchist Prince and Geographer Piotr Kropotkin argued in his *Mutual Aid* against Darwin, or perhaps more correctly so against Herbert Spencer and the Social Darwinists (Cf. Kropotkin, 1904). Kropotkin argued that not competition but rather co-operation was the driving force of progress in history between races and species – of animals as well as human beings – in primitive societies as well as in modern societies. True to the main stream of his time, however, Kropotkin attributed this co-operative force to biology. As opposed to a biological understanding of altruism<sup>270</sup> and 80 years before Kropotkin, List instead attributed this force of co-operation, in the idealistic fashion, to the human spirit.

A recent illustration, of the principles of an organic confederation of labour versus a mechanical division of labour, is found in Robert R. Locke’s article, *Managerialism and the Demise of the Big Three*. The big tree US automakers demise is explained as a failure to implement JMS (Japanese Management Systems). Success is here traced to successful Japanese confederation of labour (co-operation systematically geared towards quality and innovation), rather than American mechanical division of labour (specialisation) and conflict-provoking authoritarian command lines. Locke writes,

So it is the collective motivation and organizational learning capacity of people running the techniques not the techniques proper that matters. (Locke, 2009)

#### **4.22 Mental side of transportation**

The transportation system was a vital part of List’s national confederation of Labour, being its physical foundation. Without this network gluing together the individual parts, there would be no collaboration, no market, no confederation, and no nation.

For some time, economists have understood the importance of physical transport, but it may surprise that List held that transport’s primary function was cultural, or ideal. The most important role of transport was to convey ideas, spark new ideas and promote innovation.

---

<sup>269</sup> Paradoxically, Durkheim who was influenced by e.g., August Comte, endeavoured to use the methods of the physical and empirically sciences on social issues.

<sup>270</sup> Being perhaps a forerunner of “the altruistic gene”?

List argues that transport was more important for its cultural (immaterial) impact than for its physical impact; more important for education and production than for consumption;

... railroad transport functions more spiritually than materially, more through people than through matter, more on the productive forces than on the distribution of goods, and finally more on education, the well-being and the enjoyment of the producing classes, than on the consuming. (List, 1838, p. 7, my translation)<sup>271</sup>

Furthermore, science, tourism, intercultural understanding and peace would increase due to cheaper transport, ...

... intercultural understanding and peace would increase due to cheaper transport. Transport was more important for its cultural (immaterial) impact than for its physical impact (List, 1838, p. 7, my translation)

The emphasis on the cultural role of transport has remained a strong tendency in German economic thought. Karl Bücher especially points to the crucial role of communication for economic activity and, in particular, for a community's cultural life, the liberation of the individual and the capacities of each individual, in the same spirit as List. Bücher calls attention to the cultural impact of transportation,

... one would be wrong if one thinks that the effects of transport on economic system are limited. As we have shown it is in essence not at all an economic phenomenon, and treating transport as a part of economics has only served to limit the scope of view. This is already clear since every development begins with transport of intelligence, not with transport of goods and people, and since the early instances serve State purposes. (Bücher, 1893, pp. 212, my translation)

The present transport system consists of a multifarious large number of private undertakings and public institutions. With its increasing *independence* and with *universal access* it has first of all become an enormous culture shaping power, which so often is praised. Not only has it reshaped company structures of industry, agriculture, handicraft, mining, trade, banking and insurance, it has permeated the whole of human society and let it grow tightly together. (Bücher, 1893, p. 216, my translation)

---

<sup>271</sup> This is the original German version: „... der Eisenbahntransport mehr geistig als materiell, mehr durch die Menschen als durch die Sachen, mehr auf die productiven Kräfte als auf die Verbreitung der Producte, endlich mehr auf die Bildung, das Wohlsein und die Genüsse der producirenden Classen, als der consumirenden zu wirken bestimmt ist.“ (List, 1838, p. 7)

#### 4.23 Urbanisation furthers communication, innovation and freedom<sup>272</sup>

Early economists like Antonio Serra (Cf. Serra, 1613) and later Friedrich List argues that the crammed communication of towns made them the forging blacksmiths of progress.

Theodore Laue describes List as the strongest adherent of an urban-industrial society ever, and who anticipated Marx' disdain for "the idiocy of rural life". In contrast, according to List, the urban man is always on the alert and continuously sharpens his mind. Laue writes,

There never was a more inspired paean to urban-industrial civilization than Chapter Seven, Book II, of the National System: "Of Manufacturing Industry and of the Personal, Social, and Political Productive Forces or Powers of a Country." A rural society shows, one reads there, "slowness of apprehension, bodily inactivity, adherence to old ideas, old processes, old usages, old habits, a defective education, with lack of comfort and personal liberty." Trade and industry, on the other hand, stimulate "the desire for a continual increase of moral and material wealth, emulation, and a love of liberty." Here indeed was first spelled out what Marx a few years later in the Communist Manifesto called "the idiocy of rural life." Urban man, on the other hand, "is incessantly buying and selling, exchanging and negotiating. He is everywhere in collision with men, with laws and institutions; and he is kept at all times on the alert by changing circumstances; he has a hundred-fold more occasion to exert his mind than the peasant." Further on one reads: "The well-known fact, that among manufacturers time has an incomparably greater value than among farmers, testifies to a higher estimation of labor. The degree of civilization of a people and the estimate they fix upon labor cannot be better measured than by the value they set upon time." (Laue, 1963, p. 58)

Individual freedom, diversification, democracy, and rule of law are according to List, vital result of urbanisation. List claims that industrialisation promotes urbanisation since it concentrates the productive factors,

The productive powers of agriculture are scattered over a wide area. But the productive powers of industry are brought together and are centralised at one place. This process of concentration eventually creates an expansion of productive powers which grow in geometric rather than in arithmetic proportion. (List, 1837a, p. 69)

When this concentration forges a geometric expansion, it might be read as if List envisions 'increased returns' to scale, but this would not be precise. 'Increased returns' is a strictly technical term, which means that the production elasticity for one input is higher than one, ceteris

---

<sup>272</sup> Cf. also the sections; *Transportation and urbanisation promotes competition*, and *Mercantilism promoted competition, efficiency - and profitability*, in chapter 6.

paribus, i.e. all other factors hold constant. In other words, 'you gain more than you spend'.

In this case, the input is "concentration" of productive factors, as List explains and List's reason for why concentration is productive is not technical, it is sociological,

Mental friction, ... , only exists where people live together closely, ... Therefore liberty and civilisation have everywhere and at all times emanated from towns. (List, 1841a, pp. 203-204, see an extended quotation below)

List explains that towns (and better communications) establish concentration. This concentration causes social and intellectual "friction" and co-operation; which makes better ideas flourish; allows the individual more opportunities; and develops better institutions. Towns are therefore the hotbed of individual liberty, innovation and the elevation of civilisation. List writes,

Under the powerful influence of habit, everywhere among merely agricultural nations has the yoke which brute force or superstition and priestcraft imposed upon them so grown into their very flesh, that they come to regard it as a necessary constituent of their own body, as a condition of their very existence.

On the other hand, the separation and variety of the operations of business, and the confederation of the productive powers, press with irresistible force the various manufacturers towards one another. Friction produces sparks of the mind, as well as those of natural fire. Mental friction, however, only exists where people live together closely, where frequent contact in commercial, scientific, social, civil, and political matters exists, where there is large interchange both of goods and ideas. The more men live together in one and the same place, the more every one of these men depends in his business on the co-operation of all others, the more the business of every one of these individuals requires knowledge, circumspection, education, and the less that obstinacy, lawlessness, oppression and arrogant opposition to justice interfere with the exertions of all these individuals and with the objects at which they aim, so much the more perfect will the civil institutions be found, so much larger will be the degree of liberty enjoyed, so much more opportunity will be given for self-improvement and for co-operation in the improvement of others. Therefore liberty and civilisation have everywhere and at all times emanated from towns... (List, 1841a, pp. 203-204)

For these reasons List argues against a geographical extension of population and capital in the US, since this would dilute the nation and create inefficient sprawl,

Whilst the United States by protecting duties would attract foreign capital and skill, they would prevent in the interior a very disadvantageous extension of population and capital over an immense continent. ... As the Roman military power was weakened by the extension of their territory, so, I fear, the power, the progress of civilization, the national strength of this union would be checked by an additional accession of states. Fifty millions

of Americans in one hundred states scattered over the whole continent, what would they do? — clear land — raise wheat — and eat it. The whole American history of the next hundred years shall be contained in these three words, if you do not what Jefferson said - place the manufacturer by the side of the farmer. This is the only means of preventing population and capital from withdrawing to the west. (List, 1827b, p. 71)

In the typical German idealist and rationalist Renaissance tradition, List argues that the industrially based urban lifestyle rewards the individual with humane and liberating benefits, (Cf. List, 1837a, p. 69).

List also explains how urbanisation and industrialisation depend on each other,

Urbanisation depends on industrialisation, like industrialisation depends on urbanisation and its potential for communication, trade, justice and liberty. List points out the quickly information travels in towns, how easily its population may come to an agreement, concentrate its resources and unite with other towns. (List, 1841a, p. 207)

The town populations will secure to themselves their most sturdy defenders (against the absolutist rulers, probably) by giving the country peoples a share in the cultural riches of the towns,

The country derives energy, civilisation, liberty, and good institutions from the towns, but the towns insure to themselves the possession of liberty and good institutions by raising the country people to be partakers of these acquisitions. Agriculture, which hitherto merely supported landowners and their servants, now furnishes the commonwealth with the most independent and sturdy defenders of its liberty. (List, 1841a, p. 208)

Throughout German history, there is strong tradition in regarding urbanisation, communication, and industry as positive for individual freedom and, accordingly, innovation. Karl Bücher describes the blessings of transport in this way,<sup>273</sup>

This has increased the capacity of every individual, increased his perspective, revolutionised the thought and opinions of people and even their daily living habits, as well as changed the state and the family. Its existence is today the precondition for every individual, it so to say pushes the blood faster through the social body; It is no more isolated. Whether we want to or not, its influence is the foundation of even the smallest utterance of our life.

This gives an infinite enrichment of all human existence, and an increase of every individual's power, which in sum lifts modern society above every former. We find precisely the disruption of transport one of the most painful effects of the last war, and one of the foremost blessings of the new peace must be a free working transport system. (Bücher, 1893, pp. 216-217, my translation)<sup>274</sup>

---

<sup>273</sup> This quotation is a continuation from the section above; *Mental side of transportation*.

<sup>274</sup> Cf. also the essay, *Transport and Civil Liberty – Karl Bücher's Contribution*, 248



Georg Simmel, the German economist (nowadays “redefined” as “sociologist”), also describes how freedom, individualism, urbanism are linked. In the last sentences below, he points to the crucial role of communication, connecting the city beyond itself and thus staging the scene for cosmopolitanism,

Cities are, first of all, seats of the highest economic division of labor. ...

All this forms the transition to the individualization of mental and psychic traits which the city occasions in proportion to its size. ...

It is not only the immediate size of the area and the number of persons which, because of the universal historical correlation between the enlargement of the circle and the personal inner and outer freedom, has made the metropolis the locale of freedom. It is rather in transcending this visible expanse that any given city becomes the seat of cosmopolitanism.

.... The most significant characteristic of the metropolis is this functional extension beyond its physical boundaries. (Simmel, 1903-1950, pp. 409-424)

#### 4.24 Networking and Social Capital

The economic role of social ‘networking’ and ‘nearness’ (whether actual or “virtual” through efficient transport/communication), was as we have seen highly regarded by Friedrich List (Cf. e.g. List, 1841a, pp. 203-204).

The beneficial effects from urbanisation and communication; and furthermore from related phenomena like ‘social networks’, ‘networking’ and ‘clusters’, this all may all be described as different effects of a principle of geographical ‘proximity’ or ‘nearness’.

All of these effects contribute to establishing efficient home markets<sup>275</sup> and improving the national ‘co-operation of Labour’. The socio-geographical and logistical ‘nearness principle’ translates in short to an efficient maximisation in time and space of; utility of places, connections; and closeness of related activities - And quite simply; it boils down to efficient ‘networking’, except for one complication: Since we are dealing with human beings, the nearness issue also concerns *social* relations. In other words, it concerns the social stability, which is necessary for development of social trust, which again is essential for efficient trade credit and norms- and law enforcement.<sup>276</sup>

Furthermore, with the advent of industrialism, traditional society began to dissolve, and along with this development, the tight established social networks of traditional society dissolved - and new relations more

---

Daastøl, 2000, especially pp. 397-398).

<sup>275</sup> See also the section, *Creation of a home market & feed-back mechanisms*, in chapter 6.

<sup>276</sup> See also the section, *Stability furthered by closeness*, in chapter 6.

based on market relations and on bureaucratic routines evolved. As Durkheim somewhat “counter-intuitively” put it, the ‘mechanical solidarity’ of traditional societies was replaced with an ‘organic solidarity’ in complex societies (Cf. Durkheim, 1893, p. 126ff). This schism between tradition and modernisation was thoroughly debated by e.g. Hegel and Müller, and by List’s “successors” in Germany.<sup>277</sup>

Social networking is the basis for the modern concept of ‘Social Capital’. There are innumerable definitions of ‘social capital’, but the common denominator is ‘social relations’.<sup>278</sup> The phenomenon was paid scant interest in mainstream economics and even not in social theory in general, until the 1960s. However, the interest in the economic effect of ‘social relations’ took off in 1990s with a flood of studies, e.g. Pierre Bourdieu’s *Ökonomisches Kapital, kulturelles Kapital, soziales Kapital* (Cf. Bourdieu, *The Forms of Capital*, 1986).<sup>279</sup>

#### 4.25 Perfecting the balanced harmony of productive powers

List argues that symbiosis increases output above the aggregate of individual productions. In the national organism, each part benefits from the perfection of other parts (and therefore has an interest in their perfection),

We may notice how the augmentation of the powers of production in consequence of the separation of occupations and the co-operation of the powers of individuals begins in the separate manufactory and extends to the united nation. The manufactory prospers so much the more in proportion as the commercial operations are divided, the more closely the workmen are united, and the more the co-operation of each person is insured for the whole. The productive powers of every separate manufactory are also increased in proportion as the whole manufacturing power of the country is developed in all its branches, and the more intimately it is united with all other branches of industry. The agricultural power of production is so much greater the more intimately a manufacturing power developed in all its branches is united locally, commercially, and politically with agriculture. In proportion as the manufacturing power is thus developed will the division of the commercial operations and the co-operation of the productive powers in agriculture also develop themselves and be raised to the highest stage of perfection. That nation will therefore possess most productive power, and will consequently be the richest, which has cultivated manufacturing industry in all branches within its territory to the highest perfection, and whose territory and agricultural production is large enough to supply

---

<sup>277</sup> See a discussion of this in the sections, *Hegel’s liking for Civil Society*, *Conservative liking for Civil Society*, and *Marx’s disliking for Civil Society*, in chapter 5.

<sup>278</sup> See also the end of the section, *Public goods*, in chapter 5.

<sup>279</sup> For a good and fairly recent overview of the relevance for business strategy, see Burt, 2005.

its manufacturing population with the largest part of the necessities of life and raw materials which they require. (List, 1841a, pp.152-153)

One side of the synergy effect of this division and co-operation of labour is that it is greater the more variety there is among branches and occupations. Among these, List ranked higher those activities that demanded more skill, since they would increase this same variety more - as would for instance manufacturing as compared with agriculture. Apart from this, he did not attach any higher moral rank to mental than to material occupations. The variety of branches and occupations is potentially larger the more populated, connected and “infrastructured”, and therefore urbanised, that a society is.<sup>280</sup>

List’s emphasis on the harmony of the productive powers and on the confederation of Labour has implications for organisation and remuneration, both inside companies and on a national scale. When collaboration is essential for productivity, then organisation type, remuneration differences will be essential for the legitimacy of leadership, and the co-operative will of the employees and population.

List was keenly interested in the systemic side of economics. He therefore was an interested observer of the interrelationships between different markets; how the way ‘some’ markets functioned; was crucially shaping, connected to; and reliant upon how ‘other’ markets functioned. Most branches are mutually interdependent as List points out.

... the success of one particular branch of industry depends on that of several other branches ... (List, 1841a, p. 39)

Moreover, he claims that the historical case of England confirms this,

The English have thus given a striking confirmation ... that all individual branches of industry have the closest reciprocal effect on one another; that the perfecting of one branch prepares and promotes the perfecting of all others; that no one of them can be neglected without the effects of that neglect being felt by all; that, in short, the whole manufacturing power of a nation constitutes an inseparable whole. Of these opinions they have by their latest achievements in the linen industry offered a striking confirmation. (List, 1841a, p. 387)

List argues that in a nation all branches of production depend on each other, and when in proper relation to each other they together constitute the harmony of the productive powers,

As in the pin manufactory, so also in the nation does the productiveness of every individual -- of every separate branch of production -- and finally of the whole nation depend on the exertions of all individuals standing in proper relation to one another. We call this relation the balance or the harmony of the productive powers. (List, 1841a, p. 160)

---

<sup>280</sup> Further discussed below in the sections, *Mental side of transportation ...* ; *Communication furthers ...*; and *Urbanisation furthers...*

List argues that to reach a balanced development, therefore all branches need to be stimulated,

There should be a harmonious balance between all branches of production. In general the whole national economy should be stimulated. (List, 1837a, p. 185)

Professor Theodore von Laue at Harvard University, points out that List elaborated on Hamilton's strategy of 'balanced development' regarding different economic activities, which became a main theme of all variants of historical economics, British-, German-, etc. Nevertheless, Laue adds, it was industry that was to lead considerations and set the pace,

It is only fair to add that in List's ideal the economy remained balanced between agriculture, trade, and industry. Yet it was industry that set the pace. (Laue, 1963, p. 58)

#### **4.26 Communication furthers urbanisation; wealth and culture**

List points out the benefits of democracy and the benefits of improved communication for democracy (Cf. List, 1837b, p. 131). Democracy is another way of saying 'universalism' i.e. equal rights, and this too was a strong tendency in the tradition of German economic thought. Bücher pointed more descriptively to the same phenomenon in transportation and health service (Cf. Bücher, 1893 p. 195 ff).

List argues that nation building was generally a continuation of the principles of city building,

The agricultural-manufacturing-commercial State is like a city which spreads over a whole kingdom, or a country district raised up to be a city. In the same proportion in which material production was promoted by this union, the mental powers must necessarily have been developed, the political institutions perfected, the State revenues, the national military power, and the population, increased. Hence we see at this day, that nation which first of all perfectly developed the agricultural, manufacturing, and commercial State, standing in these respects at the head of all other nations. (List, 1841a, p. 339)

List claims regarding coal and iron production that a better policy than tariff protection is to promote transport,

The best policy would be for the state to foster these industries by improving internal communications - canals and railways - as much as possible. (List, 1837a, p. 116)

In this experts on 'The Asian Miracle' support him. During fall 1996, a Taiwanese official was interviewed on Norwegian TV saying that,

The West speaks about the Asian miracle but there is no miracle. It is all a matter of governments directing matters so as to suit the industry, concerning infrastructure in particular. (NRK-1 TV, Aug. 1996)

And describing Japanese policies, Prof. Shigeto Tsuru is quoted by Vassilij Leontieff such,

Co-ordinating planning was successfully used in making what the author describes as "anticipatory" public investment that involved the creation of factory sites, by reclamation along with providing such infrastructure as ports and feeder roads. (Leontieff, 1994)

And List's focus on transport is as vitally important as ever. The European Commission's *White Paper* for Transport 2011, is not as profound in its understanding of the role of transport as List, by focusing mainly on the physical side of transport. Nevertheless, it still starts by stating its importance for individual liberty,

Transport is fundamental to our economy and society. Mobility is vital for the internal market and for the quality of life of citizens as they enjoy their freedom to travel. ... The future prosperity of our continent will depend on the ability of all of its regions to remain fully and competitively integrated in the world economy. Efficient transport is vital in making this happen. (European Commission, 2011)

List writes, that the more populated and urbanised a society is, the variety of branches and occupations is potentially larger. This increases reciprocal influences, exchange of ideas and the elevation of science and culture. This effect can also be achieved by "artificial urbanisation" through the construction of efficient transport infrastructure. List emphasises the role of transport for a nation,

... the wealth and culture of a people in large depends upon the circumstances of the means of transportation. (List, 1838, p. 2)

Practically no British theoretical Mercantilists, as opposed to the Men of Practice, paid attention to construction of infrastructure.<sup>281</sup> This was natural since infrastructure was a small problem. British government had long paid unusual good attention to this instrument of prosperity. Also, since Britain is an insular nation with a humid climate, nature supplied infrastructure for free in the way of natural waterways, inland and offshore. Even today, *British Waterways*, maintains a staggering 3 000 kms of canals In England and Wales.

But above all, Britain could use her extensive coast as a conveyer. The Mercantilists of the Continental nations were provoked into developing a quite different attitude.

---

<sup>281</sup> Although Steuart is an exception, he pays so little attention to the matter that this exception is insignificant (Steuart, 1767, book I, ch. IX).

England is greatly favoured by nature; but against this it may be stated that even in respect of these natural products, nature has not treated other countries merely like a stepmother; for the most part the want of good transport facilities is the chief obstacle to the full utilisation of these products by other nations .... (List, 1841a, p. 323)

Nevertheless, England showed the way List claims,

England gave the civilised world the first complete national network of highways and canals and so showed how truly remarkable are the results of constructing an efficient transport system. Such a system of communications vigorously stimulates all the productive powers of the nation. ... England has produced new sources of energy, new machines, and new manufacturing processes which have greatly increased the efficiency of transport facilities and the output of labour. (List, 1837a, pp. 136-137)

England has shown the world how powerful is the effect of facilities of transport in increasing the powers of production, and thereby increasing the wealth, the population, and the political power of a nation. (List, 1841a, p. 49)<sup>282</sup>

The power of machinery, combined with the perfection of transport facilities in modern times, affords to the manufacturing State an immense superiority over the mere agricultural State. (List, 1841a, ch. 17, p. 200)

In the *Introduction* (in the main unfortunately missing in the English edition) to the *National System* he writes, concerning the lessons he learned about infrastructure in Little Schuylkill, in Pennsylvania,

Only now did I recognise the reciprocal relationship which exists between manufacturing power and the national system of transportation, and that the one can never develop to its fullest without the other. (List, 1827b, § 22)

So, List brought with him to America the Cameralist pragmatism regarding trade and regulation as well as a focus on immaterial factors. And although Cameralism did indeed pay attention to transport, List admits that only in America did he learn about the depth of its transport's reciprocal importance for industry.

Like Leibniz (Leibniz, 1671b), List underlined the importance of cheap energy - and cheap, regular transport, and claims that industrialists promote and make transport projects profitable,

Nothing is more important for industrialists than the availability of cheap fuel and also easy, speedy, and regular transport at a low cost for all the products and raw materials which they need to build factories and to produce manufactured goods. Consequently industrialists hasten to promote the expansion of communications within a country. They foster the construction of highways, canals, and railways and the improvement of navi-

---

<sup>282</sup> This quotation has also been used in the section: *The balanced harmony of the productive powers*

gable rivers. Moreover they turn these improvements into lucrative industrial undertakings. (List, 1837a, ch. 11, p. 62)

List argues that tolls to finance infrastructure must be set so low that industry is stimulated,

1. The national transport system should be expanded to the fullest extent. This includes canals, railways, roads, steam shipping, and river shipping. Tolls should be fixed at a level that will stimulate industrial expansion in the hope that the costs of construction will eventually be covered. They should not be fixed at such a level as to raise immediately the funds necessary to pay investors interest on the capital invested in these public works. (List, 1837a, ch. 24, p. 119)

In his treatise *The World Moves* (Cf. List, 1837b), and in the book *The German National Transport-System* (Cf. List, 1838), he elaborated further on the importance of transport for progress,

By a comparison between the circumstances of ocean coasts and shores of navigable streams and the circumstances of the countries who were deprived of navigation, one would already in ancient times have acquired the knowledge that the wealth and culture of a people in large depends upon the circumstances of the means of transportation. (List, 1838, p. 2, my translation)<sup>283</sup>

Wilhelm Roscher supports List's view of the crucial importance of transport, for the extension of markets and division of labour,

Whoever, therefore, would increase the division of labor among the people, must, first of all, extend their market; and this is done most efficiently by improving the means of communication. (Roscher, 1877, Vol. I, § 61)

List argues against Adam Smith who follows the Physiocratic School in claiming that only agriculture is productive and manufacture is sterile. List claims that experience shows that investing in manufacture and transport both increase the value of land tenfold, since they both increase division of labour, the national confederation of labour and thereby the power of production. It therefore only appears (sic!) as if agriculture is most the important activity, also in a manufacturing nation,

... all capital which is devoted by the agricultural nation in a profitable manner to manufactures, increases in the course of time the value of the land tenfold. Experience and statistics everywhere confirm this statement.

...

---

<sup>283</sup> The original text in German; „Durch eine Vergleichung des Zustandes der Meeresküsten und der Ufer schiffbarer Ströme mit dem Zustande der Länder, welche der Vortheile der Schifffahrt beraubt waren, hätte man schon im Alterthume zur Einsicht gelangen können, daß der *Wohlstand und die Cultur der Völker größtentheils durch den Zustand ihrer Transportmittel bedingt sei.*“ (List, 1838, p. 2)

The reason for this appearance lies in the increased power of production in the nation, which emanates from the regular division of labour and from the strengthened confederation of the national powers, also from a better use of the mental and natural powers placed at the disposal of the nation, and from foreign commerce.

These are the very same causes and effects which we may perceive in respect to improved means of transport; which not merely yield in themselves a revenue, and through it a return for the capital spent upon them, but also powerfully promote the development of manufactures and agriculture, whereby they increase in the course of time the value of the landed property within their districts to tenfold the value of the actual material capital which has been employed in creating them. (List, 1841a, p. 240)

#### **4.27 Competition promotes innovation**

List argues that in an industrial society, market pressure or competition, was an important factor for innovation and as well for general improvement of the manufacturer's abilities, in pursuit of survival, profit and respect. List says that the manufacturer "must endeavour to become rich in order not to be reduced to poverty" and that,

The nature of manufactures is fundamentally different from that of agriculture. ...

[The manufacturer]... must strive to gain more than enough in order to be certain of having enough of what is absolutely necessary; he must endeavour to become rich in order not to be reduced to poverty ... The desire to gain the respect of his fellow-citizens ... are to him a sharp stimulus to uninterrupted activity, to ceaseless progress. ... These circumstances produce in the manufacturer an energy which is not observable in the mere agriculturist. (List, 1841a, pp. 1998-199)<sup>284</sup>

---

<sup>284</sup> Here is an extended quotation, which deserves to be read due to its sociological insight into entrepreneurial manufacturing,

"The nature of manufactures is fundamentally different from that of agriculture. Drawn towards one another by their business, manufacturers live only in society, and consequently only in commercial intercourse and by means of that intercourse. ...

While the agriculturist simply has to do with his own neighbourhood, the trade of the manufacturer extends itself over all countries and parts of the world....

[The manufacturer]... must strive to gain more than enough in order to be certain of having enough of what is absolutely necessary; he must endeavour to become rich in order not to be reduced to poverty. If he goes on somewhat faster than others, he thrives; if he goes slower, he is certain of ruin. He must always buy and sell, exchange and make bargains. Everywhere he has to deal with men, with changing circumstances, with laws and regulations; he has a hundred times more opportunity for developing his mind than the agriculturist. In order to qualify himself for conducting his business, he must become acquainted with foreign men and foreign countries; in order to establish that business, he must make unusual efforts. While the agriculturist simply has to do with his own neighbourhood, the trade of the manufacturer extends itself



Transport has the effect of enlarging the effective size of any related market and thereby increasing the competition in these markets. In this way, improved transport also increases innovation.

#### **4.28 Communication furthers innovation - and vice versa**

List therefore saw improved infrastructure, material and immaterial – especially in the shape of innovative transport (steam and telegraph) – and the legal and constitutional system – as a lever for cultural development, continuous modernisation, international friendship and peace, as in his *The German National Transport System* (Cf. List, 1838, pp. 10-14).

In List's treatise *The World Moves*, he argues in ways that are just as topical and of current interest as they were in 1837. The reason is the World Wide Web, Internet. List begins the first chapter, called *Time and Space* ("Zeit und Raum"), in this way,

The more the human spirit has the ability to communicate with other people and to act, the faster humanity will progress, because each individual thus receives more opportunities to educate themselves and to participate in the general progress and to contribute to this. (List, 1837b, p.65, my translation)<sup>285</sup>

List argues that smart individuals with the same interests are separated and this must be overcome in the interests of human progress,

Intelligent people are separated by the gap of time and space from one another. Now, if the spaces and distances are reduced to get closer together

---

over all countries and parts of the world. The desire to gain the respect of his fellow-citizens or to retain it, and the continual competition of his rivals, which perpetually threaten his existence and prosperity, are to him a sharp stimulus to uninterrupted activity, to ceaseless progress. Thousands of examples prove to him, that by extraordinary performances and exertions it is possible for a man to raise himself from the lowest degree of well-being and position to the highest social rank, but that, on the other hand, by mental inactivity and negligence, he can sink from the most respectable to the meanest position. These circumstances produce in the manufacturer an energy which is not observable in the mere agriculturist." (List, 1841a, pp. 198-199)

<sup>285</sup> The German translation from the French original: „Je mehr der menschliche Geist die Möglichkeit besitzt, mit anderen Menschen zu kommunizieren und sich Handlungen auszuführen, um so mehr beschleunigt sich der Fortschritt der Menschheit, weil jedes Individuum damit mehr Möglichkeiten erhält, sich selbst zu bilden, am allgemeinen Fortschritt zu partizipieren und zu diesem beizutragen.“ (List, 1837b, p.65)

to each other, this must contribute significantly to the progress of humanity. (List, 1837b, p. 67, my translation)<sup>286</sup>

List continues by pointing out e.g. that through improved means of communication, each individual increases the possibility of communicating with other individuals with similar interests, such as mathematics, music, technology, poetry, painting, chemistry etc.

Thus, improved communications enables each individual to improve his talents for the benefit of humanity. List's points and arguments are just as relevant today, concerning discussion groups via email, twitter or other social media, in particular. List writes,

The more resources which mankind puts at the disposal, allows an individual to develop the gifts that he has received from nature, and optimise his performance in an assigned particular destination. The more mutual contact and mutual action is available to the talented of the same kind, the greater the progress in all areas of knowledge and skills, and the faster and easier progress of all mankind. (List, 1837b, p. 67, my translation)<sup>287</sup>

The worldwide transformation that the steam engine and the wired telegraph brought in the 19<sup>th</sup> Century, relatively speaking, easily competes in importance with all later innovations in transport technology including the automobile, the aeroplane and the internet. List pointed out already in 1838 that e.g. "electro-magnetic force" would be a far cheaper, less dangerous and more general means of propulsion than steam (Cf. List, 1838, p. 7).<sup>288</sup>

List repeatedly points out how improved communications transform the whole of society. Innovative transport technology, as with the steam-powered locomotive at List's time, combines communication and innovation and thereby plays an immense productivity-increasing role.

One type of modern technology that fills this role is transport based on magnetic propulsion, for instance so-called maglev trains of both

---

<sup>286</sup> The German translation from the French original: „Die intelligenten Menschen sind durch die Diskrepanz von Zeit und Raum voneinander getrennt. Wenn nun die Zwischenräume und Entfernungen verringert und einander angenähert werden, so muß dies in starkem Maße zum Fortschritt der Menschheit beitragen.“ (List, 1837b, p.67)

<sup>287</sup> The German translation from the French original: „Je mehr Mittel, über welche die Menschheit verfügen kann, es einem Individuum erlauben, jene Gaben zu entfalten, die es von der Natur empfangen hat und durch seine Arbeitsleistung die ihm zugedachte Bestimmung zu erfüllen und je mehr Talente der gleichen Art zu wechselseitigem Kontakt und gemeinsamer Aktion vorhanden sind, um so größer sind die Fortschritte in allen Bereichen des Wissens und der Fertigkeiten und um so schneller und leichter schreitet die gesamte Menschheit voran.“ (List, 1837b, p.67)

<sup>288</sup> It took 41 more years before a rotating electromotor was first used for propulsion - on rail guided transport, by Werner von Siemens in 1879. - Siemens & Halske constructed an "electric railroad" (street car) system in Lichterfeld outside Berlin in 1881.

inter-city and urban (intra-city) types. Another type of modern transport that may be combined with the above technology is PRT (Personal Rapid Transit, or “taxi-rails”), where automated individual transport on elevated tracks gives personal service on a new flexible and user-friendly level. Arno Mong Daastøl in 1997 wrote, concerning the transformation and development of the former Socialist regimes that,

The railroad approach was especially important when this technology was relatively new. There are today new technologies in this field which may again establish railroads as an interesting field of investments; ...

The 19th century experience with railroads as an expansion of the technological frontier, has been shown to be a parallel to 20th century space-projects like Apollo (Hughes, 1965). The technological spin-offs to the rest of industry and society concerning knowledge of materials and in productivity have been immense, and for the Apollo-project calculated at around 14 times the investment-input. (Daastøl, 1996)

Whereas railroads and later technologies decreased the effective distance in transport and communication, modern ICT (Information and Communication Technology) with video-conferencing, instant messaging and chatting, etc. make the world into one global village with instant universal knowledge. This obviously has enormous consequences for spiritual freedom - the web has therefore become a powerhouse of invention and development.

Already in 1970, and in the same spirit, the still active and long serving security advisor in the US, Zbigniew Brzezinski, foresaw the development and importance of the Internet. In his *Between Two Ages: American's Role in the Technotronic Era*, Brzezinski pointed out how improved communications would create a revolutionary new kind of “technotronic societies” where knowledge becomes omnipresent instantly,

... a society that is shaped culturally, psychologically, socially, and economically by the impact of technology and electronics – particularly in the area of computers and communications....

In the technotronic society scientific and technical knowledge, in addition to enhancing production capabilities, quickly spills over to affect almost all aspects of life directly. (Brzezinski, 1970, pp. 9-10)<sup>289</sup>

Communication and innovation have in common that they are perhaps the most important types of public goods that distribute their benefits widely throughout the economies, both nationally and internationally. They also mutually reinforce each other, and this is true for for

---

<sup>289</sup> Brezinski also warned against elite surveillance of every citizen of the population; “Another threat, less overt but no less basic, confronts liberal democracy. More directly linked to the impact of technology, it involves the gradual appearance of a more controlled and directed society. Such a society would be dominated by an elite whose claim to political power would rest on allegedly superior scientific know-how.” (Brzezinski, 1970, p. 97)

the machine tool industry. As with ICT, the machine tool industry distributes innovations throughout the economies.

ICT combines communication and innovation, but additionally is a machine tool industry and thereby the queen mother of technologies today. The ICT-sector not only combines the sectors that formerly were separated, it also erases the delineation between the secondary and tertiary industries, i.e. manufacturing and service. It is both. It also integrates education.

Modern ICT fulfils to an unparalleled degree what List argues was primary function of transport, namely communication of ideas, thereby forging the national confederation of Labour to a degree previously unimagined.

#### **4.29 Freedom promotes innovation, communication and efficiency**

A central and crucial part of his world of ideas and List's agitation was freedom, "civil, mental, and religious", the lack of which had persecuted him more than once,

The spirit of enterprise, economic progress, technical knowledge, and artistic skill develops only in countries enriched by political and religious freedom. (List, 1837a, p. 164)

To what causes England owes her manufacturing and commercial supremacy, we have shown in our fifth chapter.

It is especially owing to her civil, mental, and religious liberty, to the nature and excellence of her political institutions, that the commercial policy of England has been enabled to make the most of the natural riches of the country, and fully to develop the productive powers of the nation. But who would deny that other nations are capable of raising themselves to the same degree of liberty? (List, 1841a, p. 322)<sup>290</sup>

List argues that freedom is a productive power also in the sense that it attracts bearers of knowledge, and had it not been for the follies if the Continental powers, England would have had a hard time in attracting the refugees that built English supremacy,

History teaches that arts and trades migrated from city to city, from one country to another. Persecuted and oppressed at home, they took refuge in cities and in countries where freedom, protection, and support were assured to them. In this way they migrated from Greece and Asia to Italy; from Italy to Germany, Flanders, and Brabant; and from thence to Holland and England. Everywhere it was want of sense and despotism that drove them away, and the spirit of freedom that attracted them. But for the folly of the Continental governments, England would have had difficulty in attaining supremacy in industry. But does it appear more consistent with wisdom for us in Germany to wait patiently until other nations are impolitic

---

<sup>290</sup>Also quoted above, in the section *Capital of Mind*.

enough to drive out their industries and thus compel them to seek a refuge with us, or that we should, without waiting for such contingencies, invite them by proffered advantages to settle down amongst us? (List, 1841a, p. 109-110)

Chaos seldom fosters freedom for the average person. As with language and games, a culture needs collective rules in order to make it possible for the individual to play with these, in order to benefit for himself and perhaps for society at large. The following quotation gives an idea of the important role List gave to freedom guaranteed by the legal order,

Everywhere and at all times has the well-being of the nation been in equal proportion to the intelligence, morality, and industry of its citizens; according to these, wealth has accrued or been diminished; but industry and thrift, invention and enterprise, on the part of individuals, have never as yet accomplished aught of importance where they were not sustained by municipal liberty, by suitable public institutions and laws, by the State administration and foreign policy, but above all by the unity and power, of the nation.

History everywhere shows us a powerful process of reciprocal action between the social and the individual powers and conditions. (List, 1841a, p. 107)

#### **4.30 Industrialisation fosters freedom and a humane civilisation**

List claims that history tells us that in purely agricultural nations, the population was kept in ignorance and oppression,

Everywhere merely agricultural nations have lived in slavery, or oppressed by despotism, feudalism, or priestcraft. The mere exclusive possession of the soil gave the despot, the oligarchy, or the priestly caste a power over the mass of the agricultural population, of which the latter could not rid themselves of their own accord.

Under the powerful influence of habit, everywhere among merely agricultural nations has the yoke which brute force or superstition and priestcraft imposed upon them so grown into their very flesh, that they come to regard it as a necessary constituent of their own body, as a condition of their very existence. (List, 1841a, ch. 17, p. 203)

Economic progress was in List's mind inseparable from progress in civilisation, which in List's opinion meant a liberal world modelled after the British experience, as the above quotation indicates. (See also: List, 1841a, pp. 48-52, 56, 130) List's insistent and repeated criticism of cynical British power policies toward its emerging competitor states should not make us forget that Britain was his model country, regarding both a civilised liberal political regime at home and its imperial and civilising strength abroad.

It was List's firm belief that religious and political freedom could only be attained through urbanisation, industrialization and refinement of infrastructure and vice versa (Cf. List, 1841a, p. 142). This had to be enacted through the legal system, establishing a rule of law of just and egalitarian law.<sup>291</sup> This spirit runs throughout his writings regarding the judicial system,

It has been the experience of all ages and of all countries that freedom and industrial progress are like siamese twins. (List, 1837a, p. 153)

List claims that industry will transform the morality of habit into a conscious morality and tolerance,

The more industry and agriculture flourish, the less can the human mind be held in chains, and the more are we compelled to give way to the spirit of toleration, and to put real morality and religious influence in the place of compulsion of conscience. Everywhere has industry given birth to tolerance; everywhere has it converted the priests into teachers of the people and into learned men. (List, 1841a, pp. 208)

List pointed out how manufacturing, as opposed to agriculture, creates a higher potential for individual freedom, diversification of social activity and enhanced possibilities for utilization of individual abilities, meaning especially mental abilities, thereby enhancing and harmonizing equal rights to develop one's abilities and happiness with social welfare and prosperity.

It is evident that by agriculture merely personal qualities of the same kind are put into requisition, and merely those which combine bodily power and perseverance in executing raw and manual labour with the simple idea of order; while manufactures require a thousand fold variety of mental ability, skill, and experience. The demand for such a variety of talents makes it easy for every individual in a manufacturing State to find an occupation and vocation corresponding with his individual abilities and taste, while in an agricultural State but little choice exists. In the former mental gifts are infinitely more prized than in the latter, where as a rule the usefulness of a man is determined according to his bodily strength. The labour of the weak and the cripple in the former is not infrequently valued at a much higher rate than that of the strongest man is in the latter. Every power, even the smallest, that of children and women, of cripples and old men, finds in manufactures employment and remuneration. (List, 1841a, ch. 17, p. 200)

The prime reason List gives for industrialisation and trade, in essence is that it promotes 'progress' most efficiently,

As an uncivilised nation, having a barbarous system of agriculture, can make progress only by commerce with civilised manufacturing nations, so

---

<sup>291</sup> This is a Liberal concept of law as opposed to a Conservative approach with its differentiation of rights according to social standing.

after it has attained to a certain degree of culture, in no other way can it reach the highest grade of prosperity, civilisation, and power, than by possessing a manufacturing industry of its own. (List, 1841a, ch. 15, p. 183)

... Everywhere have the cultivation of national language and literature, have the civilising arts, and the perfection of municipal institutions kept equal pace with the development of manufactures and commerce. (List, 1841a, p. 209)

List argues that industry promotes intellectual and moral forces, innovation, enterprise, productivity and can better utilise science. Industry raises the value of land, of raw materials and improves agriculture,

A country devoted entirely to agriculture esteems really sturdy physical strength most highly and accords it the greatest financial rewards. In such a society the whole range of intellectual and moral powers is virtually non-existent. But industry calls forth and promotes the growth of intellectual and moral forces of every kind.<sup>292</sup>

In the previous chapter we have shown how the productive powers of industry awaken in industry and agriculture the spirit of enterprise and innovation. We have seen how a great many natural resources - formerly of little or no value - have become increasingly valuable as industry expands. We have explained that industry promotes the division of labour in agriculture, increases the demand for new farm products, stimulates the improvement of communications, and checks the harmful subdivision of land into tiny smallholdings, while fostering a sensible division of landed property. We have shown how industry gives scope for the expansion of all kinds of skills and abilities as well as increasing the revenues and value of land. We have made it clear that normally agriculture can prosper only insofar as industry also prospers and becomes more efficient.

Agriculture gives little scope for the abilities of skilled and useful, workers. Factories, on the other hand, do give them the opportunity to use their skill so that their productive powers are multiplied by 10 or even by 100. Consequently an industrialised society will gain immeasurably more from new inventions and from scientific progress than is possible for an agrarian society. (List, 1837a, p. 68)<sup>293</sup>

The old argument that a higher division of labour caused growth, also spoke in favour of industrialisation,

A division of labour can be usefully developed in agriculture only insofar as it is brought about and stimulated by differences of soil and climate. On the other hand the various branches of industry can give unlimited scope for the division of labour. (List, 1837a, pp. 68-69)

---

<sup>292</sup> 1. Charles Dupin, *Forces prod.*, p. 92. [List's note] The full reference is Charles Dupin, *Forces productives et commerciales de la France* (two volumes, Paris, 1827), Vol.1, pp. 89-92.

<sup>293</sup> Parts of this quotation is also used elsewhere in this , under *Science as elevator ...* and *Industrialisation fosters ...*

Harvard University' scholar in Russian history, Theodore von Laue, comments List's insistence on urbanisation and industrialisation, as being ahead of his time,

According to List, liberty, civilization, national power, in short, the highest goals of contemporary mankind, flowed from urban-industrial life as exemplified by England. In other words, through industrialization the backward could catch up with England. Thus List fused nationalism and industrialization in an ironbound combination more fitting to the twentieth than to the nineteenth century. (Laue, 1963, p. 62)

For many, it may today seem somewhat odd that List favoured urbanisation and industrialisation, since today both are often seen as prime reasons for immoralities, such as crime, poor living conditions, and social exploitation on the one hand, and pollution and natural exploitation on the other hand.

However, appearance is not the same as the essence of the matter. And manifested matters are not the same as potential matters. List arrived at his conclusions by focusing on the principal matters of these phenomena. Although there certainly were many sad effects and incidents of urbanisation and industry, overall he found them to be potentially very advantageous.

List argues that industrialisation is necessary to construct a truly humane society, establish freedom of mind as well as democracy and a say for small people, preserve nature and its resources, thereby improving the efficiency of the economic system and adding to wealth creation. In the following quotation from 1841, List suggests reciprocity between freedom and its impact,

Let us compare Poland with England: both nations at one time were in the same stage of culture; and now what a difference. Manufactories and manufactures are the mothers and children of municipal liberty, of intelligence, of the arts and sciences, of internal and external commerce, of navigation and improvements in transport, of civilisation and of political power. They are the chief way of liberating agriculture from its chains. (List, 1841a, pp. 141-142)

List also suggests that a reciprocal relation exists between art, science and the diligence of the masses,

In the manufacturing State the industry of the masses is enlightened by science, and the sciences and arts are supported by the industry of the masses. (List, 1841a, p. 200)

List argues that through a sound industry, rent will constitute a fund for the improvement of mental culture. The point is that the multiplication of investment opportunities and the elevated culture of an indus-



trial nation, as opposed to the situation in an agricultural country, may make financial funds act as drivers of progress,

Inasmuch as a sound manufacturing industry especially tends to produce liberty and civilisation, it may also be said that through it rent itself is redeemed from forming a fund for idleness, debauchery, and immorality, and is converted into a fund for promoting mental culture, and consequently that through it the merely consuming towns are changed into productive towns. (List, 1841a, p. 205)

Lists claims that the mental- and political power of a nation “are increased in equal proportion by establishing in it a manufacturing power”, that industry must be considered as a political, defensive and financial tool. In other words, also the martial power of a nation depends on its mental power, a lesson e.g. the major British strategist Halford Mackinder took to heart (Cf. Mackinder, 1962 (1919), p.13). List writes,

... At a time where technical and mechanical science exercise such immense influence on the methods of warfare, where all warlike operations depend so much on the condition of the national revenue, ... more than ever before, must the value of manufactures be estimated from a political point of view. (List, 1841a, p. 209)

#### **4.31 Social well-being improves economic efficiency**

List was not a socialist, but it is obvious from his writings that he cared for ordinary people. List came from a practical background, and was therefore well aware of the sad situation of the working population in an agrarian economy. Industrialisation, however, offered them opportunities for moral, spiritual, social and material elevation,

In countries where arable farming has been practised for centuries it is rare to find men who rise from poverty to enjoy first a modest competence and then wealth and complete financial independence. Industry, on the other hand, offers men who start at the bottom the chance of rising to the very top by using their abilities and by working hard. The possibility of such an achievement provides a stimulus for the whole working population. A country devoted entirely to agriculture esteems really sturdy physical strength most highly and accords it the greatest financial rewards. In such a society the whole range of intellectual and moral powers is virtually nonexistent. But industry calls forth and promotes the growth of intellectual and moral forces of every kind. (List, 1837a, pp. 68)

In the typical German rationalistic Renaissance tradition, as opposed to the later irrational Romantic tradition, List continues by arguing for the humanistic and individualistic benefits of urban life-style. List argues that only in towns does the population, by force of its concentration, achieve enough momentum to oppose brute force; maintain freedom for all; and achieve safe and effective administration,

This is why the population of an industrialised society is brought together in a few conurbations in which are concentrated a great variety of skills, productive powers, applied science, art and literature. Here are to be found great public and private institutions and associations in which theoretical knowledge is applied to the practical affairs of industry and commerce. Only in such conurbations can a public opinion develop which is strong enough to vanquish the brute force, to maintain freedom for all, and to insist that the public authorities should adopt administrative policies that will promote and safeguard national prosperity. ... (List, 1837a, p. 69)

List argues that workers must be well paid and well fed, and therefore the unjust indirect taxes on necessities must be removed, and replaced by income tax in order to avoid any deficit in public budgets. He finds that in a democratic and constitutional state, it will not be difficult to collect an income tax. The removal of such consumption taxes will benefit the workers and reduce the cost of manufactured goods,

It is essential that the workers of a country which is becoming industrialised should be well paid and well fed. It is therefore necessary that the absolute necessities of life should be taxed either very lightly or not at all. The worst imposts - taxes which are contrary to natural law - are *octrois* (consumption duties) levied upon the commonest foodstuffs, fuel, soap, meat, and ordinary wine and beer.' No worker can be expected to increase his output if he is not getting sufficient nourishment. Roast beef and porter have done more for the greatness of England than one might suppose. All English parliamentary enquiries prove that the output of the English worker is two or three times as great as that of workers in other countries. The influence of the earnings of workers upon the prices of manufactured goods should not be judged by the existence of a high or a low level of wages. It should be judged by the relation between wages and output. If workers are poorly nourished their children will be stunted and weakly and so the productive powers of future generations will be destroyed. Moreover it is unjust to place the same heavy indirect taxes upon those who can afford only the barest necessities of life and those who are able to live in the lap of luxury. The worst tax of all is that upon salt because it directly threatens a nation's productive powers.

It would be injudicious to make these proposals without also suggesting how to meet the deficit in the national budget which would follow the abolition of all taxes on the necessities of life. An income tax would bridge the gap. No one has yet put forward a reasonable and sensible objection to the introduction of income tax. Its opponents have been content to argue that there are insuperable practical difficulties in assessing and collecting such a tax. This is true enough in a despotic state but it is not true in a constitutional state. In a democratic society the administration operates with the support of sound institutions and patriotic sentiments. If each citizen made a declaration of his income - and if this was checked by three different juries - a satisfactory assessment could be made and nobody would have cause to complain about it.

It is particularly important that *octrois* should be abolished and that the lost revenue should be made good by imposing an income tax. The removal of these consumption duties would help to reduce the cost of manufactured

goods and would be most beneficial to the workers. (List, 1837a, pp. 120-121)

List argues that improving the comfort of the workman increases the productive powers immensely, and increases the efficiency of the workman by a factor of two to three,

... if we compare the result of the labour of the workman in countries where he is clad and nourished like the well-to-do man with the result of his labour where he has to be satisfied with the coarsest food and clothing, we shall find that the increase of his comfort in the former case has been attained not at the expense of the general welfare, but to the advantage of the productive powers of the community. The day's work of the workman is double or three times greater in the former case than in the latter. (List, 1841a, p. 305-306)

List repeatedly emphasises that in manufacturing states the workman is far more efficient, and that the time of the workman accordingly is much higher valued (i.e. commanding higher wages).<sup>294</sup> Furthermore, "The workman begins to feel that he possesses ... the means of improving his condition", List writes,

As, however, manufactures operate beneficially on the development of the mental powers of the nation, so also do they act on the development of the physical power of labour, by affording to the labourers means of enjoyment, inducements to exert their powers, and opportunities for making use of them. It is an undisputed observation, that in flourishing manufacturing States the workman, irrespective of the aid which he obtains from better machinery and tools, accomplishes a far larger day's work than in mere agricultural countries.

Moreover, the circumstance that in manufacturing States the value of time is recognised much more than in agricultural States, affords proof of the higher standing in the former of the power of labour. The degree of civilisation of a nation and the value of its labour power cannot be estimated more accurately than according to the degree of the value which it attributes to time. The savage lies for days idle in his hut. How can the shepherd learn to estimate the value of time, to whom time is simply a burden which his pastoral pipe or sleep alone makes tolerable to him? How can a slave, a serf, a peasant, subject to tributes of forced labour, learn to value time, he to whom labour is penalty, and idleness gain? Nations only arrive at the recognition of the value of time through industry. At present time gained brings gain of profit; loss of time, loss of profit. The zeal of the manufacturer to utilise his time in the highest possible degree imparts itself to the agriculturist. Through the increased demand for agricultural products caused by manufactures, the rent and therefore the value of land is raised, larger capital is employed in cultivating it, profits are increased, a larger produce must be obtained from the soil in order to be able to provide for the increased rent and interest of capital, and for the increased consumption.

---

<sup>294</sup> This matter is also discussed in the section *The American System*, in chapter 2.

One is in a position to offer higher wages, but one also requires more work to be done. The workman begins to feel that he possesses in his bodily powers, and in the skill with which he uses them, the means of improving his condition. He begins to comprehend why the Englishman says, 'Time is money.' (List, 1841a, pp. 202-203)

List wrote under the impressions of a mainly rural continental Europe and an idealised impression of the industrial and urbanised England. He therefore held few of the positive opinions of Smith 60 years before him regarding rural life, or the negative opinions of factory life. Smith's objections came later with List, such as in List's Factory Bill manuscript of 1846 discussing the awful situation in British industry. Naturally, List as opposed to Smith of course saw matters from the German situation and -point of view (Cf. List's Factory Bill manuscript, List, 1846a). But there is more to the divergence between Smith and List than this (too) obvious point of material living conditions in industrial towns. List has deep and immaterially based reasons for his promotion of an urban-industrial lifestyle, as we will see in the sections on these two phenomena.

List also had proof and experience in the USA for his assertions that industry may benefit the ordinary working man and woman. List writes,

Recently published official statistics<sup>295</sup> of Massachusetts give a tolerable idea of the start taken by the manufactures of the United States, especially in the central and northern states of the Union, in consequence of the protective system, and in spite of the subsequent modification of the tariff of 1828. ...

Misery, brutality, and crime are unknown among the manufacturing population here. On the contrary, among the numerous male and female factory workers the strictest morality, cleanliness, and neatness in dress, exist; libraries are established to furnish them with useful and instructive books; the work is not exhausting, the food nourishing and good. Most of the women save a dowry for themselves.

This last is evidently the effect of the cheap prices of the common necessities of life, light taxation, and an equitable customs tariff. (List, 1841a, p. 99)

List refers to statistics to prove that industry allows maintaining far larger populations on a given territory and at a far higher level of prosperity,

Comparative statistics show that by the complete and relatively equal cultivation of manufactures and agriculture in a nation endowed with a sufficiently large and fertile territory, a population twice or three times as large can be

---

<sup>295</sup> 1. Statistical Table of Massachusetts for the Year ending April 1, 1837, by J. P. Bigelow, Secretary of the Commonwealth (Boston, 1838). No American state but Massachusetts possesses similar statistical abstracts. We owe those here referred to, to Governor Everett, distinguished alike as a scholar, an author, and a statesman. (List's note)

maintained, and maintained, moreover, in a far higher degree of well-being than in a country devoted exclusively to agriculture. From this it follows that all the mental powers of a nation, its State revenues, its material and mental means of defence, and its security for national independence, are increased in equal proportion by establishing in it a manufacturing power. (List, 1841a, p. 209)

List writes that more industrialised nations need better trained and more specialised people, who will command higher wages, establishing yet another reason for industrialisation,

As a nation becomes more industrialised, it becomes more necessary to secure the service of suitable, trained people in the factories and workshops. Such people are now able to command higher salaries and wages than was formerly possible. It will be easier for them to devote themselves entirely to a particular branch of knowledge, provided that they have the necessary natural aptitude and the good preliminary training. Knowledge is becoming more specialised. (List, 1837a, p. 67)

List continues by saying that as industrialisation progresses, better trained people command higher salaries, as they specialise themselves, and knowledge is becoming more specialised,

As a nation becomes more industrialised it becomes more necessary to secure the services of suitable trained people in the factories and workshops. Such people are now able to command higher salaries and wages than was formerly possible. It will be easier for them to devote themselves entirely to a particular branch of knowledge, provided that they have the necessary natural aptitude and a good preliminary training. Knowledge is becoming more specialised. It is clear that all branches of knowledge – particularly those which can be applied to industrial pursuits – are making rapid progress. (List, 1837a, pp. 66-67)

List also had something to say about the domestic- and distributional side of the debt issue that may have relevance in many countries today regarding national debt, perhaps especially so in the developing world (where corruption has allowed the elite to impose debt on the nation in order to pay for their own pleasures),

10. England's national debt would not be so great an evil as it now appears to us, if England's aristocracy would concede that this burden should be borne by the class who were benefited by the cost of wars, namely, by the rich. McQueen estimates the capitalised value of property in the three kingdoms at 4,000 million pounds sterling, and Martin estimates the capital invested in the colonies at about 2,600 millions sterling. Hence we see that one-ninth part of Englishmen's private property would suffice to cover the entire national debt. Nothing could be more just than such an appropriation, or at least than the payment of the interest on the national debt out of the proceeds of an income tax. The English aristocracy, however, deem it more convenient to provide for this charge by the imposition of taxes upon articles of consumption, by which the existence of the working

classes is embittered beyond the point of endurance. (List, 1841a, ch. 4, endnote 10, and footnote p. 55)

#### 4.32 Efficiency and value of resources

List argues that industry and science extends human potential to utilise resources that formerly had no value, and furthermore utilise the ones already in use more efficiently. In other words, progress and advance in science and industry sets off resource depletion, contrary to many later theories,

The more that man and the community perfect themselves, the more are they enabled to make use of the natural powers which are within their reach for the accomplishment of their objects, and the more does the sphere of what is within their reach extend itself. (List, 1841a, p. 210)<sup>296</sup>

... industrialisation will greatly increase the value of a country's natural resources. (List, 1837a, p. 79)

We have seen how a great many natural resources - formerly of little or no value - have become increasingly valuable as industry expands. (List, 1837a, p. 68)<sup>297</sup>

Thereby industrialisation and science will save labour and resources - and give birth to new products and processes,

The greater the advance in scientific knowledge, the more numerous will be the new inventions which save labour and raw materials and lead to new products and processes. (List, 1837a, pp. 66-67, see also pp. 64, 67-69, 79)<sup>298</sup>

In fact, in the agricultural State, that power of nature on which production especially depends, the natural fertility of the soil, can only be utilised to a smaller extent so long as agriculture is not supported by manufacturing industry. (List, 1841a, pp. 210-211)<sup>299</sup>

An agricultural nation, which inhabits a country of temperate climate, leaves therefore the richest part of its natural resources unutilised. List, 1841a, p. 214)<sup>300</sup>

---

<sup>296</sup> This quotation is also used in the section *Differentiate actual from potential – increasing irrelevance of natural advantages*.

<sup>297</sup> This quotation has also been used elsewhere in this , in the section *Industrialisation fosters ...*

<sup>298</sup> This quotation has also been used elsewhere in this , in the section *Science as elevator ...*

<sup>299</sup> This quotation is also used in the section *Differentiate actual from potential – increasing irrelevance of natural advantages*.

<sup>300</sup> This quotation is also used in the section *Differentiate actual from potential – increasing irrelevance of natural advantages*.

And industrialisation will save costs of transport, by increasing the value/weight ratio,

In addition the manufacturers are the focus of a large, lucrative, and worldwide trade with peoples of varied standards of culture who live in many distant countries. Industry turns cheap bulk raw materials, which cannot be sent long distances, into goods of low weight and high value which are in universal demand. (List, 1837a, p. 69)

List's technology optimistic view seems to correspond with the view that human kind is doomed to continue with economic growth, since this creates demand, which creates investment, technological progress, and development of new resources. Without growth and new resources, an economy will deplete the old resources it is based upon. Fortunately - and thanks to growth -, we never ran out of flint stone, would probably be one conclusion of this view.

#### **4.33 Production of energy and machines**

List pointed to the strategic role and position of the machine tool industry for national productive power. He therefore recommended it for special attention and support from the State,

... Nations which have not yet made considerable advances in technical art and in the manufacture of machinery should allow all complicated machinery to be imported free of duty, or at least only levy a small duty upon them, until they themselves are in a Position to produce them as readily as the most advanced nation. Machine manufactories are in a certain sense the manufacturers of manufactories, and every tax on the importation of foreign machinery is a restriction on the internal manufacturing power. Since it is, however, of the greatest importance, because of its great influence on the whole manufacturing power, that the nation should not be dependent on the chances and changes of war in respect of its machinery, this particular branch of manufacture has very special claims for the direct support of the State in case it should not be able under moderate import duties to meet competition. The State should at least encourage and directly support its home manufactories of machinery, so far as their maintenance and development may be necessary to provide at the commencement of a time of war the most necessary requirements, and under a longer interruption by war to serve as patterns for the erection of new machine factories. (List, 1841a, p. 314)

List argues that the machine tool industry is strategically important, and like transport a foundation for all other branches of industry,

Without machine manufactories, a nation would in time of war be exposed to the danger of losing the greater portion of its manufacturing power. (List, 1841a, p. 151)

When in short supply, machine tools should be exempted from import duties on manufactured goods, and this especially applies to innovative machines,

An exception to this rule should be made in favour of plants making machines. If a country has industries sufficiently advanced to require large numbers of modern machines of various kinds but does not have the engineering workshops which make them, it would be foolish to impose high import duties on machinery. Such a policy would gravely endanger the future productive powers of the country. This argument is valid for a country which has just begun to establish import duties to protect its new industries. Here too, as with mining, the state would be well advised to foster the establishment of joint stock companies to set up model engineering workshops for the construction of machinery. If a war were to break out these workshops could be expanded and their output would meet all the country's requirements as far as machines were concerned. All newly invented machines should be allowed to enter the country for a certain period without payment of any import duty. (List, 1837a, p. 117)

Energy is another instance of a good that is crucially necessary for many other branches. List argues that,

Nothing is more important for industrialists than the availability of cheap fuel and also easy, speedy, and regular transport at a low cost ... (List, 1837a, p. 62)

Special care must therefore be taken to secure, nurture, and protect these industries, since to a considerable degree they have the character of being public goods - along with infrastructure and the credit system.

#### **4.34 Productive public credit in a sound credit system**

A crucial and core part of a modern market economy's infrastructure is the financial system – in particular the credit system, which includes both customer credit and trade credit. This “virtual” institutional system is indispensable for a fluid working of an industrial economy.

Accordingly, List argues that the State must arrange for a proper national credit system, by providing sufficient currency in circulation, promote the establishment of credit institutions and provincial banks, and provide public inspections of all companies to ensure that proper financial routines are followed.

10. A government should do everything in its power to increase the currency in circulation to keep pace with the growth of industry. It should also promote the establishment of public credit institutions. It should encourage the establishment of provincial banks all over the country and these banks



should be authorised to issue their own notes.<sup>301</sup> But great care should be taken to ensure that these banks were run on sound financial principles.

National banks in the capital of a country, which have no branches in the provinces and issue notes only in large denominations, cannot adequately carry out the functions of country banks or cannot carry them out at all.

11. The government should try to foster the founding of new companies but should endeavour to prevent any misuse of this form of business organisation. It should forbid the issue of bearer bonds<sup>302</sup> and should make provision for the public inspection of the working of all companies. (List, 1837a, pp. 121)

List also argues that the national credit system must be protected from disturbances from abroad, which we will investigate in a later chapter. List did not devote much time into discussing public procurement, which arguably was relatively much smaller in his days than at present.

Closely related to public procurement, as well as to loans and subsidies to private industry, is the instrument of public credit. List hails the use of credit for *productive* purposes, but calls it a curse if it is used for non-productive consumption and especially if the working class should pay the interest on this debt,

The system of State credit is one of the finest creations of more recent statesmanship, and a blessing for nations, inasmuch as it serves as the means of dividing among several generations the costs of those achievements and exertions of the present generation which are calculated to benefit the nationality for all future times, and which guarantee to it continued existence, growth, greatness, power, and increase of the powers of production; it becomes a curse only if it serves for useless national expenditure, and thus not merely does not further the progress of future generations, but deprives them beforehand of the means of undertaking great national works, or also if the burden of the payment of interest of the national debt is thrown on the consumptions of the working classes instead of on capital. (List, 1841a, p. 296)

List sees state debt as a loan from future generation to the present generation, and finds this to be sound as long as the investment is productive,

State debts are bills which the present generation draws on future ones. This can take place either to the special advantage of the present generation or the special advantage of the future one, or to the common advantage of both. In the first case only is this system an objectionable one. But all cases

---

<sup>301</sup> 1. [In the same year that he wrote *The Natural System of Political Economy* List submitted a memorandum to Louis Philippe recommending the establishment of joint stock banks to finance the construction of railways (List, *Werke*, Vol. V, pp. 95-8).] (Henderson's note)

<sup>302</sup> Bearer bonds are bonds that are made out to the bearer and not to a named person. (My note)

in which the object in view is the maintenance and promotion of the greatness and welfare of the nationality, so far as the means required for the purpose surpass the powers of the present generation, belong to the last category. (List, 1841a, p. 297)

However, he here explains State credit as a loan, where the State is a debtor. He thereby ignores an important alternative way of creating public credit; utilising the State's legal monopoly of national money issuing, 'the printing press' or in our days creating 'electronic money' by the 'computer keyboard', and directing it to productivity enhancing "deflationary" purposes, such as infrastructure. This is a bit strange since he was well aware of paper money as an institutional tool ... There seems to be a missing link somewhere in List's publications. The impression one gets from his numerous references to 'paper money in circulation' is that they ought to be backed by precious metals.

A few days after delivery of the second draft on this dissertation, I suddenly realised that my criticism of List here was somewhat wrong:

List favoured species (gold, silver) backing of circulating money for most countries, but added that England did not need this, since her productive power gave her the necessary trust in the financial markets. Therefore according to List, essentially, productive power, and eventually mental power which is the core of productive power, is the true backing of (trust in) money,

The prevailing theory has evidently not sufficiently discriminated between the mere possession of the precious metals and the power of disposition of the precious metals in international interchange. Even in private exchange, the necessity of this distinction is clearly evident. No one wishes to keep money by him, everyone tries to remove it from the house as soon as possible; but everybody at the same time seeks to be able to dispose at any time of the sums which he requires. The indifference in regard to the actual possession of ready money is manifested everywhere in proportion to wealth. The richer the individual is, the less he cares about the actual possession of ready money if only he is able at any hour to dispose of the ready cash lying in the safes of other individuals; the poorer, however, the individual is, and the smaller his power of disposing of the ready money lying in other people's hands, the more anxiously must he take care to have in readiness what is required. The same is the case with nations which are rich in industry or poor in industry. If England cares but little as a rule about how great or how small a quantity of gold or silver bars are exported out of the country, she is perfectly well aware that an extraordinary export of precious metals occasions on the one hand a rise in the value of money and in discount rates, on the other hand a fall in the prices of fabrics, and that she can regain through larger exportation of fabrics or through realisation of foreign stocks and State paper speedy possession of the ready money required for her trade. England resembles the rich banker who, without having a thaler in his pocket, can draw for any sum he pleases on neighbouring or more distant business connections. If, however, in the case of merely agricultural nations extraordinary exports of coin take place, they are not in the same favourable position, because their means of procuring the ready money they require are very limited, not merely on account of the

small value in exchange of their products and agricultural values, but also on account of the hindrances which foreign laws put in the way of their exportation. They resemble the poor man who can draw no bills on his business friends, but who is drawn upon if the rich man gets into any difficulty; who can, therefore, not even call what is actually in his hands, his own.

A nation obtains the power of disposition of the amount of ready money which is always required for its internal trade, mainly through the possession or the production of those goods and values whose facility of exchange approaches most nearly to that of the precious metals.

The diversity of this property of the facility of exchange in respect to the various articles of commerce and of property, has been as little taken into consideration by the popular school of economists in judging of international commerce, as the power of disposition of the precious metals. (List, 1841a, pp. 281-284)

Thus, List has grasped the concept of paper- and fiduciary money. List also argues that the expansion of industry and the supply of money must proceed at same pace,

10. A government should do everything in its power to increase the currency in circulation to keep pace with the growth of industry. (List, 1837a, pp. 121)<sup>303</sup>

List here indirectly suggests that the state supplies directed productive credit itself, by using its legal monopoly of issuing money. Nevertheless, he does not take the final step by expressing this openly. If he had done so, he would have been ahead of today's governments.

This was, however, to some degree suggested by various economists in Germany ending with cross-political consensus in 1931, such as at the Friedrich List conference in 1931. Hansjörg Klausinger's following comment is relevant for the situation of Greece today,

... the Lautenbach-Plan was developed in the aftermath of the crisis when there was no chance anymore - if there ever was one - of raising a foreign loan. (Klausinger, 1985, p. 379, also cf. Backhaus, 1985)

And as Backhaus wrote in 2002,

... self-financing forms of public works are preferable such as those designed by Wilhelm Lautenbach and implemented between 1932 and 1935. In relying on the Keynesian multiplier and accelerator effects, the funds spent wisely yield a return that constitutes the original fund. (Backhaus, 2002)

In the 1930s, US President Franklin D. Roosevelt used the RDF (Reconstruction Finance Corporation) for similar purposes and this also became the role of the 'KfW' in post-WW II Germany (*Kreditanstalt für Wiederaufbau* - the post-war Reconstruction Credit Bank).

---

<sup>303</sup> Quoted more extensively above, in this same section.

Investments must be financed with claims in future production. It is especially so the case if investments are highly productive and lead to a fast capacity expansion. Therefore, the orthodox argument of 'first save and then invest' is turned upside down: 'First invest'.

List omits mentioning the non-inflationary character of productive investment, which is another important argument for its construction.

Nevertheless, according to List, the use of state debt and investments into transportation is by far the most profitable project for future generations,

No expenditure of the present generation is so decidedly and specially profitable to future generations as that for the improvement of the means of transport, especially because such undertakings as a rule, besides increasing the powers of production of future generations, do also in a constantly increasing ratio not merely pay interest on the cost in the course of time, but also yield dividends. (List, 1841a, p. 297)

In fact, List argues that the present generation has a duty to invest in transportation projects,

The present generation is, therefore, not merely entitled to throw on to future generations the capital outlay of these works and fair interest on it (as long as they do not yield sufficient income), but further acts unjustly towards itself and to the true fundamental principles of national economy, if it takes the burden or even any considerable part of it on its own shoulders. (List, 1841a, p. 297)

## 5.0 Regulation<sup>304</sup>

### Content

5.01 Summary	277
5.02 Transaction costs of interrelated branches	280
5.03 Public goods	282
5.04 Global public goods	284
a) Tariffs and international trade agreements	285
b) Strategic state procurement	286
5.05 Natural Rights and ‘the selfish system’	287
a) Natural Rights	287
b) ‘the selfish system’ of irrational man	288
c) Rational and moral perfection	291
5.06 Perfecting the State	291
5.07 Hegel and the nation - the quest for liberty	294
5.08 Hegel’s liking for Civil Society	296
5.09 Conservative liking for Civil Society	300
5.10 Marx’s disliking for Civil Society	304
5.11 Marx’ dislike of gradual improvement	306
5.12 The bureaucratic pitfall	309
5.13 Law, regulation and economics	310
5.14 Regulation and intervention	312
5.15 List’s relation to Law and Economics	313
5.16 List’s approach versus Law and Economics	316
5.17 Incentives from law and regulation	317
5.18 List and the public interest	319
5.19 Jurisprudence’s obligation to counter vested interests	321
5.20 List’s contribution to law and economics	323
5.21 Law, individual freedom and democracy	325
5.22 A pragmatic social-conservative?	326
a) England’s constitutional liberties	328
b) Russia	330
c) China	333

### 5.01 Summary

Markets do not always function optimally, and may need a benevolent ‘guiding hand’ in addition to the ‘hidden hand’. Some examples are ‘transaction costs’ and ‘public goods’.

‘Transaction costs’ are the costs of making economic exchanges. One version of transaction costs is the extra cost incurred by the interrelationships between markets. Individual actors in one market may depend on other markets, but have little influence on them, or insufficient

---

<sup>304</sup> See also the sections, *Public regulation of the merchant interest*, and *Generalisations play down regulation and nation*, in chapter 3.

incentives to engage in them. This often results in market failures and imperfections, which may be corrected by a collective agent.

A public good is normally described as a good that is non-rivalrous and non-excludable, and therefore display concentrated costs and dispersed benefits. This makes them unattractive to private investors, leading to structural underinvestment. Public goods also give rise to the 'free-rider' phenomenon, and to the 'tragedy of the commons', all entailing economic inefficiency. In short, the existence of a public good may lead to societal loss, if not regulated.

Some public goods may even be global, such as knowledge. Global public goods can be used by everyone without reducing the benefits for anyone else.

Since trade policy and in particular infant industry protection is an instrument in furthering know-how, trade policy may be considered as a way to promote public goods, and paradoxically this also goes for patent policies.

Furthermore, strategic state procurement and investment may be used strategically to promote public goods and reduce transactions costs.

When one assumes that unregulated markets will benefit the common good, this assumption has roots in the pre-Socratic philosophy. It is tightly related to the lack of differentiation between private and public interests and to the question that Bernard de Mandeville termed 'private vices, public benefits', meaning the question of whether private vices can be used for the public benefit. This ancient pre-Socratic theory, including the theory of natural rights, was revived during the Enlightenment, often referred to as 'the selfish system'.

The tradition of confusing private- and community interests is also related to the Image of Man as basically either irrational or rational: The tradition opposing the 'the selfish system' also appealed to Natural Rights, but considered that Man's prime duty to God was not simply biological survival but rather intellectual and moral perfection. This philosophy was continued with the Renaissance, the Reformation and with German Idealism. The task became to erect *Heaven on Earth*, i.e. perfecting the State. This may be seen e.g. with Hegel's view of the nation – as a quest for liberty. In this quest, Hegel emphasised the extreme importance of civil society, as an instrument for individual liberty, as tools for individual development. J.J Rosseau on the other hand, saw the institutions of Civil Society as impediments to such liberty, and English classical economists and K. Marx followed him in this approach.

The Romantic and Conservative respect for Civil Society as intermediating organisations between the individual and the state is seen also in List's view of the nation; as an intermediating organisation between the individual and the global market. Just as the Conservative Edmund Burke argued for the intermediates' role in nurturing and securing the individual's freedom and opportunities, so List argues for the exact parallel role for the nation.

Both economics and law promote general welfare as their ultimate goal, and the goal of analysis is nowadays perceived as promoting economic 'efficiency'. In both, there is no reason to interfere politically as long as there are no negative 'externalities'.

A core part of List's criticism against Smith concerns a lack of differentiation between private interests and public interests. List repeatedly argues that private interests differ from national interests, and that unfettered markets cannot properly take care of the national interests: The national interest therefore requires an active state.

List devoted his life to arranging the legal system to serve economic efficiency, for the common good. Like the Cameralists, List defined his profession as a duty to direct and regulate in search of perfection. Through libertarian ideas, he promoted more efficient markets, -for ideas, -for innovation, and for entrepreneurial activity. He argues that injustice was a major reason for existing economic problems, and that more justice would serve efficiency, and vice versa. Regarding List's agenda, at first he might be mistaken for a modern Liberal, but his emphasis on the need for regulation makes a difference.

What separates List from modern law and economics would be his emphasis on the immaterial production factors; factors that cannot be measured and accordingly cannot be priced.

However, List's close attention to the role of immaterial factors also made him aware of the role of incentives in economic development; and how these could be propelled by regulative and legal arrangements. He discussed the incentive structure thoroughly, and regarded it as crucial for entrepreneurship and the promotion of the mental powers of production, for instance regarding tax incentives.

Law and economics today, also deals with the incentives structure, but mainly within the standard economic image of Man, as purely self-interested. List's approach is wider, but more difficult to formalise.

Like Leibniz, List saw legal action as a tool to restrict the randomness and excesses of the bureaucracy. Furthermore, he argues for agricultural reform to promote democratisation and industrialisation, and for political reforms to promote a representative parliamentary system. The civil liberties of this system were supposed to promote an urbanised and industrial society.

Nevertheless, List was pragmatist and argues that the government of a people must correspond to the maturity of the people. In some instances therefore, absolutism might promote progress better than more democratic systems. What mattered most he argues, was stability, individual liberty and security of property.

On this background, List may be considered as a pragmatic Social-Conservative, and not really in the Liberalist camp where he normally is placed.

In Russia and China, Sergei Witte and Sun Yat-sen promoted policies similar to List, concerning economic development and civil liberties, but Communist rule put reversed the civil liberties.

## 5.02 Transaction costs of interrelated branches

List claimed that markets have different characteristics, and to work properly, they need to be treated in different ways through public legislature (Cf. List, 1841, p. 333, referring to Serra, 1613). As with nations and individuals, there is no such 'one size fits all'.

Some branches more than others, are more 'dependence creating' for other branches. This means that it matters especially much to an economic system whether these markets function or not. They have a key role.

List knew the basic and key function these constituted, as carpets and productivity-enhancing locomotives for other economic activities in ..., practically speaking any society. He was therefore especially eager to make these basic markets fulfil their functions better by shaping the constitutional, legislative and regulative system with this in mind.<sup>305</sup>

'Transaction costs' are cost incurred in making an economic exchange. One version of transaction costs is the extra cost incurred by the interrelationships between markets.<sup>306</sup> This occurs when individual actors in one market are dependent upon other markets, but alone have limited influence on them - or they have insufficient incentives to engage in them, when benefits are compared with related costs - even though this malaise might affect all the actors.

This illustrates a case of market failures and market imperfections, which may be corrected by a collective "macro" agent. Lack of joint action to rectify such failures, however, results in unnecessary costs that may be far distributed. Sergei Witte, the Russian PM and translator of List, illustrates that this principle was well understood: He writes in his *Memoirs* that the state has to take initiative when private enterprise fails in providing important services for the national economy,

---

<sup>305</sup> List pointed this out in e.g. these instances, regarding;

- education (Cf. List, 1827d; List, 1837a, pp. 119 and 66-67; List, 1841a, pp. 139, p. 200, 203-204 and 386-387; List, 1841b, p. 315);

- science (Cf. List, 1837a, pp. 64-69, and 79; List, 1841a, pp. 48, 128-129, and 200);

- transport (Cf. List, 1837a, pp. 136-137; List, 1837b, in general but e.g. p. 67; List, 1838 in general but e.g. pp. 2 and 7; List, 1841a, pp. 49, 200 and 323);

- energy, (Cf. List, 1837a, pp. 62 and 136-137; List, 1837b, in general; List, 1838, in general); and

- machine tools (Cf. List, 1837a, p. 117; List, 1841a, pp. 151 and p. 314).

<sup>306</sup> Transaction costs, in the sense of Steven N. S. Cheung, however, are related to costs that arise due to the existence of institutions, and therefore according to Cheung should be called "institutional costs". The question immediately arises whether Cheung ever saw an economy without institutions ... (Cf. Cheung, 1987)



The new policy was and is based on the belief that railroads have a major importance for the state and that private enterprise, which is basically concerned with private interests, cannot adequately serve the interest of the state in this field. (Witte, 1990, p.192)

List advises special care taken to secure, nurture, and protect such key branches, which are of particular interest for other branches and the common good of a nation. List here includes resources like energy,<sup>307</sup> and strategic raw materials. For centuries iron has been serving as a vital input to other sectors, and List argues that,

... Iron is a raw material that influences all the productive powers of a country. (List, 1837a, p. 117)<sup>308</sup>

In particular, when a resource is hard to come by, and needed by many agents who by themselves alone cannot influence the supply, we may speak of incurred transaction costs. Increased knowledge of alternatives can amend this; increased knowledge of how to access and extract the resource; or by mutual action through e.g. the government.

In general, however, List singles out regulation of the branches that are related to infrastructure – read large – as especially important. He considers these branches to be the “foundation” or precondition for other branches.

For List, these activities are normally related to knowledge, new knowledge, and transport of knowledge.

Infrastructure, in a larger means functions that hold society together - like a social glue - includes knowledge (e.g. productive competence, grammar, measurement standards, education, media, research); transport (primarily communication of knowledge, also by moving new machines); security (of property; of resources; and of know-how), and machine tools (new know-how), markets (e.g. a fair, and the credit system) and administration.<sup>309</sup>

Also new technology has a strong element of knowledge embedded, and have this quality the more easily this knowledge is distributed to other sectors. This concerns in particular machine production, and in our time especially ‘computing’; information and communications technology (ICT): such characteristics are displayed by e.g. fiber optics, transistors and derived products like ICs, CPUs, and RAM (i.e. ‘Integrated Circuits’, ‘Central Processing Unit’, and ‘Random Access Memory’).

We may argue that the more ‘key’ branches are, and the more they are related to knowledge – and the more they have the character of being public goods.

---

<sup>307</sup> (Cf. List, 1837a, pp. 62 and 136-137; List, 1837b, in general; List, 1838, in general)

<sup>308</sup> A more extensive quotation may be found in the section *Pragmatism - focus on potential and value added*, in chapter 6.

<sup>309</sup> Cf. the list of references on this issue in appendix 2b.

### 5.03 Public goods

Differential treatment of (different) markets in particular concerns markets for public goods. As ‘transaction costs’, they must be treated differently, receive preferential treatment, not only in order to function themselves, but also in order to make other and perhaps many other markets function better. For instance, the well-being of the machine tools markets, the energy markets and the communication markets are crucial for practically every other market in society, and therefore must all be treated with particular care.

Modern theory of public goods goes back to Paul Samuelson’s article *The Pure Theory of Public Expenditure* (Samuelson, 1954) where he dealt with the issue on two pages. Samuelson wrote in 1954, and the 1959 edition of Richard A. Musgrave’s classic textbook *Public Finance* still had a very rudimentary approach to public goods as “goods the inherent quality of which requires public production”,<sup>310</sup> and spent no more than one page on this issue out of more than 600 pages (Musgrave, 1959, pp.43-44). In the 1960’s, interest in the issue grew, clearly marked by Mancur Olson’s classic *The Logic of Collective Action: Public Goods and the Theory of Groups*. Indicative of the economic profession’s ignorance regarding organisations before him, Olson writes that,

Economists have for the most part neglected to develop theories of organizations, but there are a few works from an economic point of view on the subject. ... (Olson, 1965; 1971, p. 5)

Olson then gives a list of eleven books and articles written between 1951 and 1961. This ignorance of the “Liberalist” tradition contrasts strongly with the “obsession” with ‘the Confederation of Labour’ and Civil Society that List showed, along with his successors.<sup>311</sup> Concerning this long tradition of attention to organisations in German economics, Olson mentions e.g. Max Weber, Robert Michels, and George Simmel, but as is usual within the contemporary economics profession, Olson classifies them as Sociologists – as he does with the Norwegian-American economist, Thorstein Bunde Veblen.

The character of some goods and markets, approach the characteristics of public goods more than other and therefore deserve special attention. This is not an either or question, but a matter of degrees.<sup>312</sup>

---

<sup>310</sup> Musgrave writes that “Our concept of public wants may thus be supplemented by a concept of public *goods* - that is, goods the inherent quality of which requires public production. While public goods are characteristically goods that satisfy public wants, not all goods that satisfy public wants may be public goods in this sense.” (Musgrave, 1959, p.44)

<sup>311</sup> See e.g. the section, *Confederation of Labour*, in chapter 4.

<sup>312</sup> When a good is rivalrous and non-excludable we have what is often called a ‘common pool resource’. When a good is non-rivalrous and excludable

The benefits of public goods concern two distributional aspects: timewise and so-called 'external effects'.

Time-distribution concerns the fact that pay-back time for many investments in public goods is long, such as for infrastructure, education and research.

External effects – 'externalities' or 'spin-offs' - concerns on the positive side for example; productivity improving effects of new technology, or efficiency-synergy from organisational co-operation; and on the negative side increased distrust, or environmental pollution.

A 'pure public good' is normally described as a good that is both non-rivalrous and non-excludable, in the sense that the use by one individual does not reduce availability to others, and in the sense that individuals cannot be effectively excluded from using the good (Cf. e.g. Olson, 1965; 1971, p.36ff; Gravelle and Rees, 1981, pp. 504-507; 517-518; and Stiglitz, 1999, p. 309).

Public goods are also related to 'social capital'. It is characteristic of 'social capital' that its value grows with more use, in diametrical opposite of private goods, and more so than 'public goods'.<sup>313</sup>

The costs of public goods tend to be concentrated to the investor but their benefits are distributed to a far larger community of users.

These characteristics result in private investors lacking sufficient incentives for individual action; they make public goods less attractive to individual agents. For these reasons there is likely to be an under-investment in public goods: These areas tend to have structural underinvestment, if markets are not regulated, directly or indirectly, so as to correct this imperfection. Market 'self-regulation' is therefore 'per definition' often inadequate or inefficient in the case of public goods. (Cf. e.g. Olson, 1965; 1971, p.11-36; and Gravelle and Rees, 1981, pp. 517-518)

The existence of pure public goods is therefore also related to the so-called 'free-rider' phenomenon (Cf. Olson, 1965; 1971, p.29), and to the related 'tragedy of the commons': A 'free rider' takes advantage of the investments made by others but contributes nothing or little to investment or maintenance (Cf. Hardin, 1968).

As a result of structural underinvestment and under-maintenance, we get a tragedy of the commons. This concerns 'natural' issues like unspoilt nature, e.g. clean air and water (Cf. e.g. Fischer, 1981, p.167ff), - but also concern 'cultural' issues like knowledge and media broadcasting. The problem is that whereas no-one has enough interest to invest in construction of maintenance, access is so easy that the good may be overused and spoilt.

---

we have what is often called 'club goods'. A public good can change its characteristics when it becomes subject to legal or technical restrictions, regarding access and use: They may become quasi-public goods, club goods or even private goods. Some exclusion mechanisms are copyrights, patents, congestion pricing, data encryption, and pay television (Cf. e.g. Buchanan, 1965; and Gravelle and Rees, 1981, p. 505).

<sup>313</sup> See also the section, *Networking and 'Social Capital'*, in chapter 4.

Public goods, of various degrees, are therefore a prime target of governmental regulation and lawmaking. This are therefore reasons for governmental intervention into development of many kinds of infrastructure like for instance; human (education, science); institutional (measurements and legal system); organisational (law enforcement and defence); and material (energy and transportation).

Some arguments for public action in the face of public goods are,

- Concentrated costs and widely distributed benefits
- Implies natural monopoly and economics of scale
- Major investment costs above the reach of most micro agents
- The system may benefit, but not the individual small micro agent
- Cost-benefit bottom line of a micro agent promotes no action
- Implies sub-optimal investment level
  - for micro agents and for economic system at large
- A macro agent must take responsibility for the system at large - for its benefit
- Macro action should rely on a general understanding of wealth creation
- Infrastructure – read large - is a public good

The cost of investment for public goods is often high and therefore results in strong economics of scale and high barriers to entry. This is beneficial for the establishment of a natural monopoly, if the investor can manage to collect payments; fees, dues, or taxes. As with monopolies in general, this may lead to potentially damaging monopoly inefficiency and overpricing. The ultimate expression of this is the Communist State.

#### 5.04 Global public goods

List argues that just as private interests may differ from public interests, national interests may differ from global interests,

Conditions, events, etc., may be profitable in individual economy for some persons, and injurious to the community; or, on the contrary, they may be injurious to individuals, and prove highly beneficial to the community: *Individual economy is not political economy.*

So — measures, principles can be beneficial to mankind, if followed by all nations, and yet prove injurious to some particular countries, and vice versa. *Political economy is not cosmopolitical economy.* (List, 1827b, Letter 5, p. 75)

List thereby indicates an area of research; ‘Global Public Goods’, which is receiving increased attention (Cf. e.g. Kaul, Grunberg and Stern, 1999). Many public goods are related to knowledge and the communication of knowledge. As former leader for the World

Bank,<sup>314</sup> Joseph Stiglitz, argues in his article, *Knowledge as a Global Public Good*,

Today we recognize that knowledge is not only a public good but also a global or international public good. We have also come to recognize that knowledge is central to successful development. The international community, through institutions like the World Bank, has a collective responsibility for the creation and dissemination of one global public good - knowledge for development. ... In particular, I emphasize the role of knowledge for development, articulated forcefully in the World Development Report 1998/99 (World Bank 1998b), and the consequences thereof. (Stiglitz, 1999, p. 308)

### **a) Tariffs and international trade agreements**

Knowledge as a global public good, is also related to the difference between raw materials and finished goods; knowledge-based (manufactured and refined) goods distributed by ideal and material communication. In this perspective, also trade policy is an instrument in furthering public goods, generally understood as the creation of know-how. The infant industry argument is one argument of this type, regarding learning and new know-how in production as an instance of a potential and future public good. And as noticed above, List was in particular observant of such basic functions of infrastructure, including education; administration; security and communication.<sup>315</sup>

Concerning security, List knew, from mercantilist experience and literature, how monopoly power in "intelligence market", as well as in "the military and naval market" spilled over into other markets, i.e. by diplomatic cunning and brute force.

List repeatedly discussed in detail and at length the strong historical experiences in this regard, especially concerning the Sea powers, the Venetians, Portuguese, and Dutch. He also paid much attention to e.g. the English 'Act of Navigation' (Cf. List, 1841a, ch. 4, p. 46), but List conveniently all forgot the strong use of power by the Hanse.<sup>316</sup>

---

<sup>314</sup> I.e. the IBRD - The International Bank for Reconstruction and Development.

<sup>315</sup> See e.g. the section, *Mental side of transportation*, in chapter 4.

<sup>316</sup> The Hanse used power against e.g. the Wends, Danes and Norwegians - where trade and use of weapons went hand in hand. The Wends did not fare well. The Hanse League was initiated as a defence league against centuries of northern raiders (e.g. Goths, Vikings, etc.). The founders were disciplined Teutonic monk knights at the North Sea, and related merchants from Westphalia and Saxony. On invitation by Poland and blessed by the Pope, the Teutons went on a crusade in the East and "settled" in the land of Prussia, populated by the heathen Wends (Slavs / Latvians) hostile to Poland. These lands were incorporated into the League. The League was initiated and headed by Lübeck, the once frontier settlement against the east, and finally established in 1356.

A prominent example of use of military power by the Hanse is their thorough physical devastation of most of Norway's populated regions in two major raids

## **b) Strategic state procurement**

After List, public procurement (purchase) for various purposes has been an increasingly important instrument in the industrialisation process. This is related to both Socialist and standard Liberal and Conservative conceptions of public duties, such as the up keeping of infrastructure in the widest sense: Health, education, transport, law, security, defence etc.

List does not seem to have missed this point, but he does not spend much time on it. One reason is possibly the small scale of public procurement of his time. Nevertheless, he mentions state investments in infant industry (Cf. List, 1841a, p. 315) and transport (Cf. List, 1841a, p. 297). Furthermore, he repeatedly advises investment into strategic branches.<sup>317</sup>

His pupils, saw this clearly and extended his general principles into this field; utilising public procurement to promote domestic know-how, production, jobs and a wider tax base.

In particular England, but e.g. also Sweden, used public procurement in particular the navy, to raise a row of private manufacturing establishments.<sup>318</sup> Nevertheless, investment into civilian activities, e.g. education, innovative infrastructure, and -energy production, is a more

---

in 1368 and 1369 (along the coast from Bergen in the west to the Swedish border in the east, by today's Gothenburg). Norway was the former dominating Sea Power outside the Mediterranean, in the North Sea and the Baltic. Norway had herself used her powers against client states and competing regions, such as the major retaliation mission against Danish and North-German trading towns in 1284.

Norway's power had been utterly broken by the Black Plagues in 1349 and 1363, removing more than half the population, and up to 80 % in some regions. The Hanse League then deliberately made an easy killing of a former competitor, and secured her power in northern Europe for centuries to come (Cf. Gierløff, 1945, pp. 11-19).

<sup>317</sup> See e.g. the sections, Production of energy and machines, and Communication furthers urbanisation; wealth and culture, in chapter 4.

<sup>318</sup> In the middle of the 19<sup>th</sup> Century Sweden was a non-industrial and poor country. Constructing Göta kanal was seen as a way to kick-start Sweden's economy, this is a huge canal system intended to link the two major towns Stockholm and Gothenburg - cutting the country in two. But when the canals finally opened in 1832, they were fast becoming outdated. Railroads were soon far more efficient.

However, the most lasting impression of the canals was not the canals themselves, although a great tourist attraction today. They made a huge impression on the Swedish industry, by importing British expertise and technology and establishing a row of mechanical industries throughout the interior of Sweden. This began Sweden's impressive journey into becoming one of the world's most advanced industrial nations (Cf. e.g. Magnusson, 2000, p. 115ff)

efficient way of transforming an economy than investments into martial activities.

More recently, the procurements of Pentagon and NASA in the USA have been famous for their ability to develop new technologies and industries, like the precursors of the Internet, ARPANET (Advanced Research Projects Agency).

The often-ignored trick with public procurement is to make them performance specific and technology-open, thereby promoting to innovation and increased productivity, quantitatively and qualitatively. This option of making public procurement promote innovation has increasingly been acknowledged internationally, e.g. in the so-called 'Wilkinson report', *Public Procurement for Research and Innovation* (European Commission, 2005).

## 5.05 Natural Rights and 'the selfish system'<sup>319</sup>

### a) Natural Rights

The leading Physiocrat and finance minister in France, Turgot, was the hero of A. Smith. Smith was also, as Marx, an admirer of Aristotle who in his *Politics* (Aristotle, 350 BC) used the dichotomy 'natural' vs. 'unnatural' in his analysis.

The Physiocrats defined their system as the natural system and the core of classical economics has the structure of natural law. This was an axiomatic-deductive system, deducing statements from established axioms based on introspection of 'clear and distinct' facts (Cf. Descartes, 1637, e.g. pp. 65, and 163). The historical school was an explicit rebellion against this unempirical scholastic attitude. The ultimate axiom concerned the duties of man towards God.

The materialist faction of the philosophical tradition of Natural Rights claimed that Man's ultimate duty was biological survival. Hobbes was one of the Enlightenment pathbreakers for this originally hedonist tradition ('hēdonē' is Greek for 'pleasure'), however Christian in words he claimed to be. Although Hobbes wanted to moderate egotism with his (un-controlled) Leviathan dictator, he still believed egotism to be the principal founding stone of the social order. Egotism thus became the principle of all practical philosophy, and even Spinoza made it the foundation of his philosophical system, whereas Descartes elaborated a mechanical system of emotions (Cf. Windelband, 1893, p. 412)

The Idealists in England, primarily the Neo-Platonists Ralph Cudworth and Henry More at Cambridge, undertook the warfare against Hobbes (Cf. Windelband, 1893, p. 382; and Cassirer, 1932: *The Platonic Renaissance in England*). Leibniz and the English Idealists were at-

---

<sup>319</sup> For a brief discussion of the relation to the *Enlightenment* and the analytical method, see the section *The rational and analytical method*, in chapter 2.

tacked by Locke and Newton, and these attacks on the Neo-Platonic School at Cambridge by Locke and Newton had more than epistemological importance, since it was connected to a political struggle between (national) monarchy versus (feudal and local) aristocracy. The former argued for State intervention and the latter for *Laissez nous faire* (leave us alone). The latter represented major socio-economic interests and held strategical positions.<sup>320</sup>

The Neo-Platonists referred to Thomas Aquinas who had declared benevolence to be the ultimate axiom of natural law. More's friend, Gottfried Wilhelm Leibniz and his younger collaborator Christian Wolff continued this attack on the Hobbesian school by developing a system where the Platonic and Renaissance idea of *perfection* became the founding stone instead of *conservation* (i.e. biological survival). This conflict reflects two different images of man, this time as the ultimate foundation for the system of Natural Law. This psychological question signalled the dawn of Enlightenment. One image was of Man as a spiritual and moral being, and the other of Man as a biological being – 'a cunning animal'.

Both the idealist and the materialist traditions connect to the system of natural law. Both traditions can be said to pursue the duty towards God and the 'happiness of Man' but the sources of happiness are quite different, and one would believe that their understanding of God should be different as well.

The duty of Man within the Materialist tradition was biological survival, whereas the duty in the idealist tradition was moral perfection. In the source of happiness within the materialist tradition, happiness results more from satisfaction of more mundane needs. The Idealist tradition understands happiness as resulting from spiritual sources where Man enjoys the unfolding of his potential to understand and do good (i.e. perfection of rational morality).

## **b) 'the selfish system' of irrational man**

Wilhelm Windelband, Schumpeter's favourite historian of philosophy,<sup>321</sup> describes the tradition as 'hedonism', 'the selfish system' and 'utilitari-

---

<sup>320</sup> This struggle coincided with *The Glorious Revolution* of 1688, when the Protestant Dutch Stadtholder, Prince Willem III of Orange-Nassau, was invited by aristocrats who rebelled against the Catholic King James II, and became King William I of England. Along with Willem III from the Netherlands, came also Bernard de Mandeville and several British exiles, such as John Locke and his prominent pupil, the 3rd Earl of Shaftsbury, Anthony Ashley Cooper, Lord Ashley, one of Britain's richest men. John Locke became the secretary of the *Board of Trade*, and argued against public regulation of coinage. Locke's friend Isaac Newton was simultaneously 'Chancellor of the Exchequer' in Great Britain. Together they were a formidable pair and quite an opponent to be reckoned with for Leibniz and the Cambridge Neo-Platonists.

<sup>321</sup> '...I shall name but one name, that of the man whose work seems to me



anism' as a dominant trait of the Enlightenment period, as opposed to the Idealism of the former Renaissance period. Besides Lamettrie, Holbach, and Helvetius, Bernard de Mandeville developed this view in his *Fable of the Bees, or Private Vices, Publick Benefits* (Mandeville, 1714, with an early version in 1705). Wilhelm Windelband writes that Hobbes' selfish system also lent itself to a separation between morality and motives, in other words to the possibility of 'private vices and public benefits' – that individual sin could be good for society,

The close connexion in which this utilitarianism stood historically after Hobbes with the selfish system that is with the assumption of the essentially egoistic character of human nature led necessarily to the separation of the question as to the criterion of morality and the kind of knowledge by which it is apprehended, from that as to the sanction of the moral commands and the motives for obeying them. (Windelband, 1893, pp. 513-514)

The tradition of regarding private vices as public benefits is, however, much older than this, probably as old as philosophy itself, probably starting with the ancient philosophies of Aristippus and Epicurus (Cf. Windelband, 1893, pp.70, 85ff and 165, 170). This concerns the legitimation of egotism, and this contrasts with the duty-oriented tradition of among others Stoicism. The ethics of this materialist tradition is utilitarian, hedonistic and "outcome"- and "result" oriented.

Wilhelm Windelband and 'therefore' Joseph A. Schumpeter, point to pain and pleasure as the motive force in the hedonistic tradition of British Classical Economics, and to social atomism as its sociology.<sup>322</sup> Therefore, the Epicurean background, rooted in former Greek *hedonism* and *atomism*, of English classical economics deserves to be mentioned in some detail,

The great difference in apprehension of the ethical life which exists between the Epicureans and the Stoics, in spite of a number of deep and far-reaching common qualities, becomes most clearly manifest in their respective theories of society and of the state. .... Epicureanism carried through systematically the ideas already developed in Sophistic teaching concerning the origin of the political community from the well-weighed interest of the individuals who formed it. ... And as is the case for their origin and content, so also for their validity and acknowledgment, the amount of pain which they are adapted to hinder and pleasure which they are adapted to produce, is the only standard. All the main outlines of the utilitarian theory of society are logically developed by Epicurus from the atomistic assumption that individuals first exist by and for themselves, and enter voluntarily and with design into the relations of society, only for the sake of the goods

---

to have been the peak achievement of the 'historical philosophy' of that or any other age: Wilhelm Windelband.', (Schumpeter, 1954, p. 775).

<sup>322</sup> See also the section *List's Realism versus British Nominalism* in chapter 2; *Epistemology and the English Classical School*, and *Malthus' heirs in the English Classical School* in chapter 3.

which as individuals they could not obtain or could not protect. (Windelband, 1893, pp. 174-175)

David Hume, his pupil A. Smith, and J-J. Rosseau, created more refined versions of the hedonistic system. These Enlightenment philosophers created a system ultimately based on the assumption that Man is irrational. Action is caused by will based ultimately on feelings or so-called "sympathy", as Descartes and Spinoza also argued (Cf. Windelband, 1893, p. 516-517). The logical result is to separate morality and science where morality deals with (subjective) belief and sympathy whereas science deals with (objective) knowledge.

When List criticises Smith's system with such hard words as "It is a doctrine ... based upon the most despicable egotism" (List, 1837a, p. 104),<sup>323</sup> it should come as no surprise that protests occur against List's 'unfairness'. Wilhelm Roscher certainly protests, and praises at great length Smith's high morals,

... we are told. Political Economy is only the science of selfishness; Adam Smith is the prophet of individualism; grow rich *per fas et nefas* is its ultimate teaching.<sup>324</sup> Such a judgment is evidence of much levity and little enlightenment. ... (Roscher, 1877, § 12)<sup>325</sup>

But Roscher's praise concerns Smith's *Theory of the Moral Sentiments*, whereas List criticised his economic ideas as demonstrated in *The Wealth of Nations*. In addition, as Mark Blaug writes, these books

---

<sup>323</sup> For an extended quotation see the section, *Differentiate private versus community interests*, in chapter 3.

<sup>324</sup> The expression '*per fas et nefas*' is Latin for 'by right and wrong'. AMD's note

<sup>325</sup> Roscher continues; "The first sentence of his *Theory of the Moral Sentiments*, which is a full resumé of his theory, is as follows: "How selfish soever man may be supposed, there are evidently some principles in his nature which interest him in the fortune of others, and render their happiness necessary to him, though he derives nothing from it, except the pleasure of seeing it." And this is no empty declaration on his part. It is the thought which of all in his book is nearest to his heart; and hence he energetically assails those philosophers who look upon self-love and the refinements of self-love as the universal cause of all our sentiments, and seek to explain sympathy by self-love.

La Rochefoucauld, Mandeville and Helvetius never met with a more determined or energetic adversary. Nowhere have the sweet and amiable virtues, such as ingenuous condescension, indulgent humanity, and the respectable and severe virtues, such as disinterestedness and self-control which subject our movements to the requirements of the dignity of our nature, been better understood or interpreted." Adam Smith is the philosopher of sympathy. ... His theory triumphs over the cowardly and shameful egotism which concentrates the moral life of the individual in himself, and separates it from the life of the human race of the *outré* stoicism which refuses the aid of sentiment to reason." (Roscher, 1877, § 12)

are radically different, respectively using sympathy and self-interest as basic axioms,

Adam Smith is a particularly striking case because he in fact employed radically different modes of reasoning in different parts of his works. ... Given the pivotal role of sympathy for other human beings in *The Theory of Moral Sentiments* and that of self-interested behavior in *The Wealth of Nations*, both of these books must be regarded as deliberate attempts by Smith to apply this Newtonian method first to ethics and then to economics ... (Blaug, 1980, p.56)

### **c) Rational and moral perfection**

The opposition to materialism (liberalism) was rooted in different stakes, as well as in different ethical traditions that had a deontological tendency; towards duty based ethics,<sup>326</sup> such as Platonism, Stoicism and Christianity. All regarded Man's ultimate duty as moral perfection, as with Socrates, Augustine, Thomas, Cusa, Leibniz, Wolff and the idealist Renaissance tradition. (Cf. Windelband, 1893, pp. 85, 427-434, 524)

In the idealist tradition, morality is rational. Morality and rationality are the same. Morality is rational. Rationality is moral. The essence of being human is rationality. This sets us apart from animals. Therefore, the most human activity is to expand our rationality, and this is the most moral thing to do because it will benefit everybody else because of the commonality character of immaterial goods (as 'public goods'). Therefore, there is no reason to separate rationality and morality. Rather, in and Idealist tradition, the very motivation of science, including the economic science, must be moral. According to this line of reasoning, the dictum must therefore be that the ultimate concern of economists must be betterment of society as well as the individual citizen. Religious concerns and economic concerns are therefore close.

## **5.06 Perfecting the State**

The Renaissance political ideal of perfecting the State into *Heaven on Earth* evidently had a religious background and connotations; there is a close affinity between "utopian" views of the State during the Renaissance and religiously based views of the contemporary Reformation and Protestantism.<sup>327</sup> Catholicism on the other hand, regarded the State as mundane, according to Windelband,

---

<sup>326</sup> As opposed to 'Consequentialism'.

<sup>327</sup> For more discussions regarding the role of Protestantism, see also the section, *Religion, science and education*, in chapter 4.

The Protestant view of the world, ... removed the ban of the "profane" from the secular spheres of life, saw in the state also a divine order; and the Reformation Philosophy of Right, under the lead of Melancthon, limited the right of the state more by the right of the invisible, than by the claims of the visible Church; indeed, the divine mission of the magistrates afforded a valuable support for the Protestant State-church. Much less could the Catholic Church feel itself under obligation to the modern state; and although it thereby departed from Thomism, it allowed itself to be pleased by such theories as those of Bellarmin and Mariana, in which the state was conceived of as a work of human composition or as a compact. For with this theory the state lost its higher authority, and to a certain extent its metaphysical root; it appeared capable of abolition; the human will which had created it might dissolve it again, and even its supreme head was deprived of his absolute inviolability. While the Protestants regarded the state as an immediate divine order, for the Catholics, as being a human arrangement, it needed the sanction of the Church ... (Windelband, 1893, p. 427)

Thus, we see that in their view of institutions and the State in particular, Protestantism has its roots in Stoicism, whereas Catholicism has its roots in Epicureanism,

... But a greater distinction between the two conceptions of life shows itself in the fact that, to the Stoics, human society appeared as a command of reason, which must give way only occasionally to the wise man's task of personal perfection, while Epicurus expressly denied all natural society among men, and therefore reduced every form of social conjunction to considerations of utility. (Windelband, 1893, p. 174 and 518 ff)

"Protestant" Cameralism reached its height in Prussia and Austria's Cameralists were influenced (e.g. the leading German and Lutheran Cameralist J.J. Becker), and even had a parallel with the protestant Jean Bodin in France. The perception of the State in "Protestant" Cameralism, as an instrument for perfecting Man, continued with German Idealism with its Pietistic Protestants, such as the philosophers Kant, Fichte and Hegel.

They were all involved in a quest for 'Heaven on Earth' so to speak, a practical reformist convergence to a utopia starting here and now. In fact, this road of convergence, this acting dynamism, was in itself seen as a crucial part of this perfection: The ability for active imitation of God, by understanding and changing his creation, was Man's part taking in God's own dynamic nature, thus perfecting Man, Society, and the World.

This drive for perfection was a common trait in Renaissance thought, which continued with the German Enlightenment.<sup>328</sup> These political-religious Renaissance ideas were later also transferred to American politics and philosophy.<sup>329</sup> It took the shape of a Renaissance movement

---

<sup>328</sup> For a treatment of the drive for perfection, see Reinert and Daastol, 1998, chapters 4 and 6.

<sup>329</sup> See Hans W. Schneider's *A History of American Philosophy*, and the below 292

called “Congregationalism”, which set the democratic and mercantile pattern for American social thought. By transforming Man’s mind into an image of God they aimed at creating God’s Kingdoms on earth. This had direct political implications, and even technology was “Godly”.<sup>330</sup> Although it is ill remembered, in 1776 at the time of the American Declaration of Independence, nine of 13 colonies had state religions inscribed in their constitutions.

Somewhat paradoxically for protestant England, English Classical economics shares its view of the State with Catholicism and “ultimately” with ancient Greek Epicureanism, Leucippus, Democritus, etc. Windelband describes the view of Hobbes, Hume and Smith as rooted in Epicurean Atomism; carried on as individualistic Nominalism,

All phenomena of the ethical life are thus rooted, according to Hume and Smith, in the social life, whose psychological basis is sympathy, ...

The fundamental thought, which the philosophy of the Enlightenment would hold as to the great institutions of human society and its historical movement, was prescribed for it in advance, partly by its dependence upon natural-science metaphysics, and partly by its own psychological tendency.

...

This conception was guided into the political and juristic track primarily by Hobbes. The state appeared as the work of individuals, ... The same Epicurean compact-theory, which had revived in the later Middle Ages, passed over with Nominalism into modern philosophy and extended its influence over the whole eighteenth century. (Windelband, 1893, pp. 518-519)

In his *Theory of the Moral Sentiments*, Adam Smith illustrates this essentially laissez-faire view of the State in English classical economics,

... the care of the universal happiness of all rational and sensible beings, is the business of God and not of man. ... Nature has directed us to the greater part of these (means to bring happiness about) by original and immediate instincts: ... (which) prompts us to apply those means for their own sake, and without any consideration of their tendency to those beneficent ends which the great Director of Nature intended to produce them. (Smith, 1759, part VI, section II, ch. III, p. 237)<sup>331</sup>

---

ginning in his first chapter, *The Platonic Heritage of the New England Puritans* (Schneider, 1946; 1963 ed.)

<sup>330</sup> Schneider writes that, “Congregationalism was at one time more than a sect it; It was a social reform movement with a complete ideology. ... it is well to begin the study of American philosophy with it, ... The New England towns ... gradually ... embodied a mixture of Platonic idealism and Yankee mercantile prosperity. ... They defined nature as the art (*techne*) of God. ... and the discipline of the human mind is the attempt at ordered understanding of the divine wisdom. There is no secular science; the so-called “secondary causes” are intelligible, not as merely secondary, but as intrinsic instrumentalities of God’s “economy of redemption”. “Technology” is thus sanctified.” (Schneider, 1946, ch. 1, pp. 3-8)

<sup>331</sup> Interestingly, this appears in a book which is said to represent the dia-

### 5.07 Hegel and the nation - the quest for liberty<sup>332</sup>

List reflects *German Idealism* in his famous emphasis on the nation state's role of mediating between the individual and the global market: This is a close parallel to the necessary mediating role of civil society, between the individual and the state, on which Hegel insisted. Hegel's positive focus on social cohesion differs dramatically with the social Nominalism, social atomism devoid of inner social cohesion, which characterises the sociology of the English Classical School. It is interesting that Marx' also here follows the English Classical School.

Georg Wilhelm Friedrich Hegel (1770-1831) was the son of an ordinary revenue officer (as List was) in the fiscal service of Württemberg, from family of civil servants and pastors in Tübingen. His mother's family were theologians, lawyers and high-ranking bureaucrats in Stuttgart, in Württemberg. He was educated early in classical texts, in the original languages. During his studies in Tübingen, his roommates were two other prime personalities of the German Idealism, the poet Hölderlin and the philosopher Schelling. Hegel in 1818 took over the professorial chair in Berlin after Fichte, another main character of German Idealism.

The acknowledged expert on Hegel, Shlomo Avineri describes Germany's lack of unity and Hegel's special interest in Württemberg, Hegel's common homeland with Friedrich List,

The old German Empire at the turn of the eighteenth century was a hodge-podge .. all held together by the tenuous semblance of the imperial crown, ...Hegel's first confrontation with one segment of this kaleidoscope is a fragment written in 1798 entitled 'On the Recent Domestic Affairs of Württemberg'. ...Hegel's obvious interest in Württemberg, his homeland, will show itself again after 1815; this is significant not only for purely biographical reasons, but also because Württemberg was the only German Land power and actively participating in administration. Württemberg was sometimes called the England of Germany, ... (Avineri, 1972, p. 36)

In 1802, Hegel writes the essay, *The German Constitution* where he calls for unification of all the German states into one nation under one army and one emperor,

It has been the fate of Italy to come for the most part under the authority of foreign powers. ... If Germany is not to suffer the same fate as this after a few wars, it should re-organise itself as a state. ... The only way in which the German Empire might continue to exist would be by, organising a polit-

---

metrical opposite of Wealth of Nations, the first based on the axiom of altruism and the second on self-love.

<sup>332</sup> See also the section, Freedom in the German tradition, in chapter 2, regarding e.g. Rudolf Steiner's anti-unitary ideas of State.

ical power and restoring the German people's connection with Emperor and Empire.

The former could be accomplished by amalgamating the whole military strength of Germany into a single army. (Hegel, 1802)

Regarding this essay, Avineri makes the point that it is not nationalism that makes Hegel support German unification, but rather the dangers of the on-going disintegration and dehumanisation of Germany, calling for a modernisation of Germany along French lines. Avineri writes,

Though there is no doubt that the total disintegration of the old Holy Roman Empire of the German Nation in its confrontation with republican France is at the root of Hegel's treatise, it would be a mistake to see it as an appeal to nationalism or to classify Hegel as 'an ardent nationalist', ... As we shall see, the essay makes clear that ethnic, linguistic or national elements are totally alien to Hegel's deliberations. Furthermore, in 1814 Hegel warmly welcomed the decision of the Congress of Vienna not to set up a unified Germany; in an 'ardent nationalist' such an attitude would certainly be incomprehensible. (Avineri, 1972, p. 35)

From 1806 to 1813 Hegel supported the French due to their modern mode of social organisation and opposed German nationalism, and thus Avineri writes,

... from 1806 to 1813 Hegel adopted a line of wholehearted support of the French and violently opposed the German nationalist movement as well as the anti-French insurrection of 1813 so feverishly advocated by Fichte. Hegel's concern in his essay on The German Constitution is turned in another direction. The blows dealt by the French revolutionary army to the antiquated system of the historical Reich were not viewed by him in terms of a clash of two nations or two national movements but as a clash between two kinds of states and political systems. The victory of French arms was evidence of the strength and cohesion of the modern state, as forged in France by the combination of absolutist centralism and revolutionary transformation. ... The essay is thus not a call for German nationalism but for the modernization of the German political system. (Avineri, 1972, p. 35)

Avineri writes that,

Hegel comes back to the issue of Prussia towards the end of the essay, when he attempts to confront the question of how the reconstruction of political life in Germany can be accomplished. Two candidates, potentially capable of undertaking the task of political unification and modernization, present themselves to Hegel: Prussia and Austria. Hegel chooses Austria, out of considerations which derive from his views about the comparative political structures of the two entities involved.<sup>333</sup>

---

<sup>333</sup> 68: Cf. Haym, *Hegel und seine Zeit*, p. 74; Habermas, *Nachwort zu politische Schriften*, p. 348 (Avineri's note)

Prussia, as we have seen earlier, is to Hegel the epitome of a mechanistic, hierarchical, authoritarian political structure. (Avineri, 1972, p. 57)

Hegel claimed that the history of the World Spirit ('Weltgeist') is a process of unfolding and spreading individual liberty to more and more people, both within one nation and between nations: Christianity was a prime mover for individual liberty. In Hegel's time, individual liberty was at the peak of focus with the Germanic peoples, and developed even further in the USA. Thus, Hegel writes,

America is therefore the land of the future, where, in the ages that lie before us, the burden of the World's History shall reveal itself. (Hegel, 1837, *Introduction*, p. 104)

Hegel describes his moral view of the constitutional State in his *Philosophy of History*, and writes,

The History of the world is none other than the progress of the consciousness of Freedom; a progress whose development according to the necessity of its nature, it is our business to investigate. (Hegel, 1837, *Introduction*, p. 33)

The State is the Idea of Spirit in the external manifestation of human Will and it's Freedom. ... We then recognised the State as the moral Whole and the Reality of Freedom, and consequently as the objective unity of these two elements (Hegel, 1837, *Introduction*, section 3, *The Embodiment Spirit Assumes - the State*, §50)

Hegel's concept of a constitutional State was then developed into the German liberal concept of the 'Rechtsstaat', i.e. the 'Legal State' or 'Constitutional State' and contrasted with the aristocratic state - foremost by Robert von Mohl<sup>334</sup> (*Die deutsche Polizeiwissenschaft nach den Grundsätzen des Rechtsstaates*, (Mohl, 1832-1834). This 'Rechtsstaat' was seen as the precondition for an effective market mechanism and has been regarded as such ever since, within European Liberal-Conservative thought.

List's critical approach towards empty rhetoric and preference for unmasking real interests - 'follow the money', as the common expression is today - could easily have been inspired by Hegel. Hegel writes,

When liberty is mentioned, we must always be careful to observe whether it is not really the assertion of private interests which is thereby designated. (Hegel, 1837, p. 449)

## 5.08 Hegel's liking for Civil Society

---

<sup>334</sup> Mohl became List's successor as Professor of Statecraft at the University of Tübingen in 1824.



Shlomo Avineri claims that although Hegel feared social fragmentation, he was a moderniser and not a traditionalist,

It is as a reformer and a modernizer, not as a traditionalist, that Hegel levels his radical critique of conditions in Germany, while at the time remaining deeply conscious of the historical forces of the past: .....The dissolution which has thus overtaken Germany is fraught with dangers. This disappearance of the common bond uniting individuals in one body politic pushes men into an atomistic isolation which dehumanizes them. ...

The German people may be incapable of intensifying its obstinate adherence to particularism to that point of madness reached by the Jewish people – a people incapable of uniting in common life with any other. (Avineri, 1972, p. 55)

Hegel claimed that the individual had to be protected against the state and the market by in-between institutions like the guilds; the legitimacy of society and of the state was the guarantee of individual liberty, and this has to be the starting point for a philosophy of Law and Society; Avineri writes that Hegel,

... in his theory of modern society attaches extreme importance to the intermediate stages of social integration that would now come instead of the direct, immediate and total integration of the classical polis. (Avineri, 1972, p. 23)

In his chapter *Hegel's Theory of the State*, the long-time Hegel scholar Frederick Beiser describes “Hegel’s program of wedding liberal principles with communitarian ideals” (Cf. Beiser, 2005, see quotations below). This program of Hegel has been with us ever since. The dissolution of social integrity and –coherence, as a result of “modernisation” - industrialisation, urbanisation and modern transport - and accordingly the increasing dichotomy between community and individual liberty, was discussed e.g. by authors who today are classified as sociologists, like Ferdinand Tönnies, Max Weber, Georg Simmel and the Frenchman Émile Durkheim.

Adam Müller was an early forerunner of this discussion. However, he is a forgotten author in this regard, perhaps because he sided with the losing ‘tradition’ instead of with the winning ‘modernity’ (Cf. Müller, 1808-1809). The dilemma and dichotomy of ‘tradition and modernity’ was explicitly stated, perhaps first with Ferdinand Tönnies’ *Community and Civil Society* (Cf. Tönnies’, 1887). This dichotomy has since been at the core of many anthropological-and sociological studies. In his *Technology and Science as Ideology*, Jürgen Habermas describes this lasting and wide-ranging field,

By means of the concept of “rationalization” Weber attempted to grasp the repercussions of scientific-technical progress on the institutional framework of societies engaged in “modernization.” He shared this interest with the classical sociological tradition in general, whose pairs of polar concepts all revolve about the same problem: how to construct a conceptual

model of the institutional change brought about by the extension of subsystems of purposive-rational action. Status and contract, *Gemeinschaft* and *Gesellschaft*, mechanical and organic solidarity, informal and formal groups, primary and secondary groups, culture and civilization, traditional and bureaucratic authority, sacral and secular associations, military and industrial society, status group and class—all of these pairs of concepts represent as many attempts to grasp the structural change of the institutional framework of a traditional society on the way to becoming a modern one. Even Parsons' catalog of possible alternatives of value-orientations belongs in the list of these attempts, although he would not admit it. (Habermas, 1968, p. 90)

Beiser argues that many contemporaries held similar views to that of Hegel and on some issues some even, as Adam Müller, surpassed Hegel,

One of the most important aspects of Hegel's political theory is his extensive treatment of civil society (*bürgerliche Gesellschaft*) (§§ 182-256) in the *Philosophy of Right*.

Hegel's analysis of civil society has been much celebrated, the focus of much recent scholarship.

...

Supposedly, Hegel was the first thinker of the modern German tradition to recognize the importance of economics for social, political and cultural life.<sup>14</sup>

Unfortunately, such a generous assessment evaporates with a broader historical perspective. Hegel was not the first in his generation to perceive, or even to analyze, the problems of modern civil society. The young romantics did this in the late 1790s, so in this respect too Hegel was only typical of his generation.<sup>15</sup>

Furthermore, Hegel did not provide a detailed account to the laws of modern political economy, and in this regard was even behind some of his contemporaries. The treatment of money, labor and exchange in Adam Müller's *Elemente der Staatskunst* (Elements of the Art of State) (1809), surpasses anything in Hegel's published works or surviving manuscripts.<sup>16</sup>

Still, these points do not diminish the significance of Hegel's treatment of civil society. Although it is not original in recognizing the importance of civil society, and although it does not give a detailed analysis of its economic laws, it does contain an interesting attempt to reconcile the values of civil society with the demands of community. The chapter 'Civil Society' is one of the most important to assess the full meaning of Hegel's program of wedding liberal principles with communitarian ideals. (Beiser, 2005, pp. 244-245, footnotes 14, 15 and 16 omitted)

Like Mikhail Bakunin and Robert Nisbet later, Hegel criticises J.J. Rousseau. In principle, Hegel argues that Rousseau is a utopian who takes as his starting point a 'tabula rasa' dream; of an 'clean', 'innocent', 'savage' and egalitarian human being, unspoilt by the human institutions of civil society. We here see a germ for similar ideas within radical liberalism in economics, where 'market forces' are to be left alone from corrupting influence from institutions, such as intervention

from the state. We also recognise the germ of Marx' similar detest, for the corrupting influences from Civil Society. Beiser writes that,

Hegel placed great value on civil society chiefly because it was a necessary stage in the development of freedom. ... Hegel's defense of civil society in the *Philosophy of Right* made it necessary for him to reckon with his old master, Jean-Jacques Rousseau. Throughout the opening section of 'Civil Society' (§§182—208), Hegel takes issue, more or less implicitly (§§187, 194), with Rousseau. Notoriously, in his *Second Discourse* Rousseau had argued that civil society destroys freedom because we lose the power to satisfy our natural needs by ourselves; instead, we acquire new artificial needs and depend upon others to satisfy even our natural ones. Flatly contrary to Rousseau, Hegel maintains that we do not lose but gain freedom through civil society. Hegel sees a false premise behind Rousseau's argument: that freedom consists in natural independence, the power to satisfy our natural needs by ourselves. He insists per contra that freedom involves the power to liberate ourselves from our natural needs and to act according to rational principles (§187R). (Beiser, 2005, p. 241, Beiser's references are to Hegel's *Philosophy of Right*, Hegel, 1820)

The Protestant influences on Hegel should here be obvious, both regarding the relation to "natural needs", and regarding the desire for voluntary self-determination, 'freedom' ...

Hegel's argument is that Civil Society empowers individuals, as tools and instruments empower individuals. List's argues the same later on, regarding the State. Thereby, Hegel strove to reconcile a spurious opposition between individuals and society,<sup>335</sup> as Kenneth Westphal writes,

Hegel did espouse an organic conception of individuals and society. However, it is crucial to understand how he recast the issue. Typically it is supposed that there are two positions on this issue. Either individuals are more fundamental than or are in principle independent of society, or vice versa: society is more basic than or "prior to" human individuals. Hegel realized that these two options form a false dichotomy. ... Hegel's views have been widely misunderstood and castigated by critics who were beholden to a false dichotomy. ... Hegel regarded the demand for rational understanding and justification of norms and institutions as the hallmark of modern times,<sup>7</sup> and he sought an account of society and government that met that demand (Westphal, 1993, pp. 236-237, endnote 7 omitted)

Many themes that Hegel discussed were, as Beiser pointed out (Cf. Beiser, 2005, p. 245), common issues of debate in contemporary Germany. Many later philosophers and politicians were influenced these debates, and List is no exception. This dilemma and schism, between liberty and community; tradition and modernity, was at the core also of

---

<sup>335</sup> For a thorough discussion of this issue see Hjalmar Hegge's published dissertation, *Freedom, Individuality, and Society* (Hegge, 1988). Hegge argues with Rudolf Steiner that "true" individuality is developed in the spiritual creative process, not in material consumption.

Friedrich List's discussions of the tension field between progress and stability. Therefore, a similar emphasis on the need for intermediate institutions, as with Hegel, is present also in List and his economic "nationalism"; insisting that the Nation must interfere between the Individual & Firm, versus the global market. As with Hegel, we also find the philosophy of history as succeeding stages of development, elaborated by List and other German economists. As with Hegel, we also find with List the perception that a political system will reflect the mental stage, the "maturity", of the citizen in general: Their collective civilisation and culture (Cf. List, 1841a, pp. 333-334).

### **5.09 Conservative liking for Civil Society**

List's view of the nation reflects the Conservative respect for Civil Society as intermediating organisations between the individual and the State, as an intermediating organisation between the individual and the global market. Just as the Conservative Edmund Burke argued for the intermediates' role in nurturing and securing the individual's freedom and opportunities, so List argues for the parallel role for the nation. Therefore, we may describe List's position regarding 20<sup>th</sup> Century political traditions, as a pragmatic Conservative rather than as a Liberal, which usually is the place reserved for him, by e.g. Theodor Laue (Cf. Laue, 1963, p. 62).

Once again, the German admirer of Burke, Adam Müller, precedes Friedrich List on this issue, with his emphasis of intermediary protective institutions, between the individual and the state and market.

The historian of sociology, Robert A. Nisbet points to the affinity between Anarchism; Revolutionary Syndicalism; and Conservatism - in their common emphasis of the necessity of intermediate institutions between the State and the individual, with the former pointing to the modern heir of the guilds; the labour unions and the latter pointing to the guilds and the Church.

Nisbet points out that an emphasis on the necessary role of civil society, was a core trait of both Conservatism and Anarchism. Civil society had a mediating role and a protective role, between the individual and the state, and between the individual and the market. The parallel to List's view is obvious; regarding the Nation's mediating- and protective role towards the global market.

Nisbet describes the essence of Conservatism to be love for freedom, as opposed to equality and consequently economic redistribution, which cripple the liberties of the individual,

#### **Liberty and Equality**

There is no principle more basic in the conservative philosophy than that of the inherent and absolute incompatibility between liberty and equality. Such incompatibility springs from the contrary objectives of the two values. The abiding purpose of liberty is its protection of individual and family property - a word used in its widest sense to include the immaterial as well

as the material in life. The inherent objective of equality, on the other hand, is that of some kind of redistribution or leveling of the unequally shared material and immaterial values of a community. Moreover, individual strengths of mind and body being different from birth, all efforts to compensate through law and government for this diversity of strengths can only cripple the liberties of those involved; especially the liberties of the strongest and the most brilliant. This is, in brief, the view which conservative writers have unfailingly taken, from Burke on, on the relation between liberty and equality. (Nisbet, 1986, p.47)

Nisbet claims that Conservatism's love for the intermediate organization of family and family values is rooted in the understanding of the Roman Republic, Medieval Times and consequently of Conservatism, e.g. with Burke and Tocqueville, that family is the best defender of property, and vice versa, that family property is the best defender of family feeling. Legal arrangements reflect the national roles of such intermediate collective organisations. The change of entail and end of primogeniture announced the end of traditional society with its collective family character of property, and the beginning of Individualism and Modernity (Cf. Nisbet, 1986, p.55 ff).

Nisbet describes how the Anglo-Irish statesman Edmund Burke in his path breaking exposé of the French Revolution (Burke, 1790), differs between the American Revolution's quest for individual freedom whereas with the French Revolution the individual surrendered his rights and freedom to the absolute community, creating the national slogan *une et indivisible*. All intermediate social groups were thus conceived as a threat to the monolithic community. According to Nisbet, the essence of Rousseau's *Social Contract*, was to transform freedom from oppression into freedom to participate in the collective; And since Burke, the Conservative battle cry has been a warning against the misuse of Power, also by the Majority,

The message has been the unfailing object of conservative assault. Power is power, Tocqueville said in effect: it does not matter whether the power is wielded by one man, a clique, or the whole people. It is still power and therefore oppressive. From this position, set forth from the beginning by Burke and echoed immediately by de Maistre and Bonald, rose the conservative insight into the potentially despotic nature of popular government. The seductive thought that enlargement of the base of power would be automatically to diminish use of power, since the people would not tyrannize themselves, would lead, conservatives argued, to a novel form of despotism in which the entire people, or a simple majority, might impose its tyrannical will upon minorities, creative Elites, and other lesser bodies of human beings in society. A conservative mocked the Rousseauian-Jacobin view of freedom by writing: Each morning the citizen would look into the mirror while shaving and see the face of one ten- millionth a tyrant and one whole slave. (Nisbet, 1986, p.48)

In this Conservative battle-cry against Rousseau, Nisbet is joined by the Russian Anarchist Mikhail Bakunin, who argues that precisely the

celebrated democrat Rosseau paved the way for the bloody dictatorship of Robespierre under the French Revolution and the dictatorship and Empire of Napoleon I.<sup>336</sup>

Nisbet furthermore argues that the emphasis of the intermediate groups became the essence of the conservative view of freedom,

I mentioned earlier in this section the conservative fondness for the intermediate social groups and communities in the social order: those which mediate between individual and the larger political power. That was in the context of a theory of authority. Here it is important to stress the degree to which the same emphasis upon intermediate groups became the basis of a conservative view of freedom. Groups of individuals - classes, communities, guilds and corporations - seemed to Burke and Tocqueville alike to have been the principal victims of the Revolution in France: these rather than abstract individuals. Burke repeatedly referred to violations of the corporate and communal rights of Frenchmen by the Jacobins: rights in kinship, religious, economic, and other kinds of associations. (Nisbet, 1986, pp.48-49)

There is an affinity between Western Conservatism and the East-Asian love of group values: Both balance and combine the collective belonging of the individual that makes individual freedom possible. Consequently and furthermore, the economic tradition following List was well received in the Confucian- and Shinto countries for this very reason.

These Conservative and pluralist ideas, where freedom of the individual is based on the prolific intermediate groups, are shared by Anarchists of all sorts, and Nisbet has recognised as much,

There is thus implicit in the conservative defense of groups against the sovereign a pluralism that would become one of the more distinctive philosophies of the later nineteenth century. At various times this pluralism - and also syndicalism could be taken up by conservative, liberal, and radical causes alike - visible in Proudhonian anarchism and in the anarchism of Kropotkin later and the liberalism of Mill as well as the conservatism of Hegel, Tocqueville and Taine. The thesis common to all these causes is the very reverse of that enunciated by Rousseau and the Jacobins. The claims of intermediate groups upon their members do not add up to tyranny but to the reinforcements necessary to the liberty of individuals. If the rights of such groups as family, community and province are invaded by the central state - and almost predictably in the name of individuals assertedly robbed of their natural rights - the true walls of individual freedom will in time crumble. (Nisbet, 1986, p.49)

---

<sup>336</sup> In the middle of a long tirade directed against Rosseau, Bakunin writes, "He may be considered as the real creator of modern reaction. To all appearance the most democratic writer of the eighteenth century, he bred within himself the pitiless despotism of the statesman. He was the prophet of the doctrinaire State, as Robespierre, his worthy and faithful disciple, tried to become its high priest." (Bakunin, 1871, part III)

Nisbet gives us the basic reason why the intermediate groups are so important, and just as List argues concerning the nation as against the world markets, the intermediate groups are a necessary safeguarding and life giving womb for the individual's freedom against the unitary state,

The conservative position, set forth most eloquently by Tocqueville, is that intermediate associations are valuable as mediating and nurturing contexts for individuals and equally valuable as buffers against the power of the state. In democracies especially, declared Tocqueville, these intermediate associations are necessary, for they offset, by their very existence and the loyalties they win from their members, the ever-mesmerizing power of the social democratic state and its creed of equality.

The conservative stress on such groups as family, church and local community is in practice a stress too upon the several social roles which exist perforce in these groups. (Nisbet, 1986, p.49)

The essence of the Liberal/Marxian conception of freedom versus the Conservative/Anarchistic conception of freedom, seems to be their respective Images of Man and of -Society; 'Nominalist' versus 'Realist', or to put the matter in more regular terms;

A more utopian view of Man as an isolated individual being (a noble savage a la 'Robinson Crusoe'), versus a more realistic view of Man as a social being in a meaningful setting ('meaning' here refers to social-, cultural-, symbolic relations and -intentions), and furthermore:

'Society' as an accidental gathering of individuals; a simple "senseless" sum of individuals

- Versus 'Society' as a collective identity of a larger cultural character (more than an aggregate, a simple sum of some sort).

The general result is that institutions and Civil Society are seen as limiting for individual 'freedom' in the Liberal/Marxian tradition, but are seen as enabling in the Conservative/Anarchistic tradition.

We see thus that List's criticism of Adam Smith's radical liberalism resembles the Conservative criticism of the political radicals of France. Writing as he did some 20-50 years after the publication of Burke, it is likely that he was inspired by Burke's arguments, perhaps through German interpreters like Adam Müller.

Nisbet claims that a tradition in Conservatism regards Liberalism as the precursor of totalitarianism; due to its individualistic dissolution of a people's collective spirit, Liberalism may provoke a counter-reaction,

The chief accusation made against liberalism by conservatives is, and has been from Burke to Dawson, Eliot and Kirk among moderns that liberalism is a kind of Judas goat for totalitarianism. By its incessant liberationist work on the traditional authorities and roles in society, liberalism, it is argued, weakens the social structure, encourages the multiplication of 'mass-types' of human beings and thus beckons in its way to waiting totalitarian masters. 'By destroying the social habits of the people', wrote Eliot, 'by dissolving their natural collective consciousness into individual constituents. ... Liberalism can prepare the way for that which is its own nega-

tion.' It was during the heyday of Mussolini that Christopher Dawson pronounced Italian Fascism the work basically of modern liberalism. (Nisbet, 1986, p.50)

There is a parallel in List criticism of Cosmopolitanism. In his criticism of the radical Liberalism of free trade, he makes the argument that immediate free trade would only lead to the monopoly of the strongest – or dictatorship if you please – of Great Britain.

### 5.10 Marx's disliking for Civil Society

Hegel's and List's views on civil society stand in sharp contrast to the views expressed in standard Marxism and Liberalism, where civil society is seen to interfere with the workings of either the communal state (Marx), or that of the market (Smith).

This opposed tradition grew out of e.g. Rousseau's *volonté générale* (i.e. popular 'desire' or -'will') into Liberalism and Marxism, rejecting any intermediation between the individual and the State or the Market, which both were seen as more pure expressions of the popular will, by the respective movements. A "marriage" between Marxism and Liberalism should after all not surprise since the roots of Marxism lie in British Classical Liberalism, a part of the British Radical movement; being materialists and utilitarians.

Nisbet describes Marx' (and Rousseau's) discounting view of the alienating and fragmenting egotism of civil society in this way - as opposed to the unity in the communal state,

It is the conflict between civil society and the state that strikes Marx's attention. Tocqueville too had seen this conflict as we have observed, but in altogether different terms. For Marx it is not the state that is the decisive influence but rather civil society with its varied combinations of materialistic egoism and forms of alienation. The state offers man (and here we see again the strong substratum of Rousseau) a vision of community that stands in contrast to all that civil society represents. "Where the political state has attained to its full development, man leads, not only in thought, in consciousness, but in reality, in life, a double existence - celestial and terrestrial. He lives in the political community where he regards himself as a communal being and in civil society where he acts simply as a private individual, treats other men as means, degrades himself to the role of a mere means, and becomes the plaything of alien powers."<sup>337</sup> ... It is, in short, the revolutionary tension between citizenship and membership in civil society that Marx like Rousseau is concerned with emphasizing. (Nisbet, 1966, pp. 134-135)

Nisbet claims that Marx's view on civil society and individual rights is negative. Civil society is fragmented, tyrannical, and alienating, with conflicting loyalties preventing unity. - Ironically, Marx praise of the

---

<sup>337</sup> 54: *Ibid*, p. 13 (Nisbet's note, referring to Marx, 1964)



State somehow contradicts his low respect for the nation, as a relic of the past. – The so-called Romantics praised the medieval age for its unity, but for them the reason was the opposite of what Marx would have preferred: Civil society had during the medieval period a stronger position as towards the State. Moreover, indeed, Nisbet writes that Marx saw civil society as an arena of social tyrannies, such as performed by religion in particular,

What Marx writes on the state and its role in European history is penetrating. European man, Marx tells us, has emancipated himself politically from religion “by expelling it from the sphere of public law to that of private law.” Religion, from being a part of the fabric of the state, becomes, through such events as the Reformation and the rise of nationalism, a part of civil society only. “It has become the spirit of civil society, of the sphere of egoism and of the *bellum omnium contra omnes*. It is no longer the essence of community, but the essence of differentiation.<sup>338</sup> Such a passage gives us the clue to Marx’s view of civil society – an arena of economic, religious, and social tyrannies to which the individual is still subjected.

Unlike Hegel, who found in civil society—family, class, and local community – the necessary complement of the state, Marx sees in civil society only fragmentation and alienation from which man must someday be extricated. He has Rousseau’s repugnance for all that emphasizes man’s separate, differentiated identity and all of Rousseau’s love for that which emphasizes man in his communal, or what Marx calls “species” identity. It is in these terms indeed that Marx scorns the natural-law school’s insistence upon individual rights – precisely as Rousseau had. Rousseau, in his *Social Contract*, had declared that once man entered into the true political community, he would surrender all of his individual rights and acquire new ones based upon his membership as a citizen. (Nisbet, 1966, p. 136)

The State, on the other hand, was to provide unity,

If it was from Hegel that Marx got his sense of the historical role of the state in Europe, it was from Rousseau (who had of course influenced Hegel) that he acquired his sense of the state as a structure resting on the unmediated loyalties and devotions of individuals, each freed of conflicting loyalties. (Nisbet, 1966, p. 137)

One conflict of different loyalties was for instance seen e.g. in the former Eastern Bloc, where Christians in the GDR were discriminated against by the State, regarding e.g. the right to education, following the logic that one cannot serve to masters at the same time, God and The Party.

The Conservative and Anarchistic view of civil society as a necessary mediating role was thus opposed by the dictatorship of the State in

---

<sup>338</sup> 57: *Ibid*, p. 15 (Nisbet’s note, referring to Marx, 1964)

Marxism,<sup>339</sup> and as opposed to the dictatorship of the Market in Economic Liberalism - as represented in ideal types of course.

In very general terms, radical Liberalism prefers market forces to rule undisturbed, and this also goes for Marxism as long as we are talking of Capitalism and the need for advance towards a crisis that could provoke revolution and thereby the total abolishment of markets. Indeed, Marx and Engels were Social-Darwinists when it came to the global struggle for survival of nations and cultures. For the same reasons, also Lenin was a champion for free trade policies among Capitalist nations.

The dichotomy within economic strategies, namely between Nationalism and Liberalism / Marxism parallels the dichotomy within Socialism, between Anarchism and Syndicalism on the one hand versus Marxism on the other hand. This is part of a greater dichotomy within political strategies between Anarchism / Syndicalism and Conservatism, versus Marxism and Liberalism. The former favour civil society and the latter do not.

### 5.11 Marx' dislike of gradual improvement

In his book, *The Two Cultures*, the Englishman C. P. Snow, Lord Charles, describes the gorge between scientists and intellectuals,

If we forget the scientific culture, then the rest of western intellectuals have never tried, wanted, or been able to understand the industrial revolution, much less accept it. Intellectuals, in particular literary intellectuals, are natural Luddites.

That is specially true of this country, where the industrial revolution happened to us earlier than elsewhere, during a long spell of absent-mindedness. Perhaps that helps explain our present degree of crystallisation. But, with a little qualification, it is also true, and surprisingly true, of the United States. (Snow, 1959, p. 22)

---

<sup>339</sup> The Russian Anarchist Michael Bakunin was involved with Marx personally in the *International Workingmen's Association*. In the chapter *Critique of the Marxist Theory of the State*, Bakunin criticises positivism and August Comte's notion of a social science modelled according to Physics. Bakunin also criticises the notion of a 'proletarian dictatorship' which purports to express the "will of the people" as an aristocratic despotism by pseudo-scientists (Cf. Marx, *The Communist Manifesto*, 1848). In a lengthy and visionary 'tirade' against Marx, Bakunin writes,

"What does it mean that the proletariat will be elevated to a ruling class? ... The Marxist theory solves this dilemma very simply. By the people's rule, they mean the rule of a small number of representatives elected by the people. .. behind which lurks the despotism of the ruling minority, a lie all the more dangerous in that it appears to express the so-called will of the people. ..." (Bakunin, 1873, p. 331)

List's practical family background in his father's leather business as a tawer<sup>340</sup> may be of interest, as a contrast to the utopian Marx. List's practical family background in a literally dirty and also unhealthy handicraft, gave him direct insights into the monotonous toil of ordinary people, in possibly the worst of all professions, and an urge to better their conditions, for example through the use of machinery.

Similarly, List's interviews with the emigrants to America and their practical and desperate reasons for moving away from family and friends also made an impression upon List. He devoted himself to better their lot by promoting industry. As a man from practical circumstances, List never ceased to stress the importance of evading disruptions in consumption and thereby production, therefore promoting stability and slow gradual change.

### Marx - the academic utopian

Karl Marx, however, was less interested in such practical matters; gradually improving the lot of the downtrodden many. Marx became a romantic utopian who detested industry.

Marx' family background was remote from the unpleasantness of practical life. Marx's father, Herschel, was an affluent lawyer from a long family line of Jewish rabbis and owners of wine yards. Herschel converted to Protestantism to avoid anti-Semitic legislation, and changed his name to Heinrich. His son Karl Heinrich Mordechai Marx finished high school as a devoted Christian, and his first publication entitled *The Union of the Faithful with Christ*. Marx then suddenly converted to Satanism and wrote a number of poems with a most striking destructive fervour, reproduced in Wurmbrands' *Marx and Satan* (Cf. Wurmbrand, 1986, Ch. 1, see also North, *Marx's religion of revolution - The doctrine of creative destruction*, 1968).

### Marx - the revolutionary

James Gregor is a scholar on Italian Fascism and Chinese Marxism. He describes how the utopians Marx and Engels, who wanted an "all or nothing" solution, saw List's protectionist strategy at best as resulting in patchwork on a rotten civilisation that would prolong the alienation of working class life. Gregor writes that Marx therefore supported free trade, which would drive the world to extreme misery, chaos, revolution and towards a world without industry and markets. Gregor writes,

The treatment accorded the protectionists by the first Marxists was unresponsive—at best. Neither Marx nor Engels considered the issues ad-

---

<sup>340</sup> To taw is to convert (skin) into white leather by emulsions, and by mineral tanning, as with alum and salt.

dressed by List worthy of serious consideration. Marx and Engels were totally unconcerned with national economic development.

For Marx, Friedrich List's preoccupation with the industrial growth and development of Germany was at best quixotic, at worse, calculated deception. In his most extensive discussion of List's ideas, Marx insisted that the developmental program advanced in the *National System* failed to address the real issues facing humankind. ...

For Marx and Engels the primary reality of the modern world was the constant, irremediable, and irreducible conflict between classes. The ... enemy was not underdevelopment, or a foreign nation, it was an indigenous and exploitative class.

If anyone were seriously concerned about "England's industrial tyranny" over economically less-developed nations, it was argued, the issue could be resolved not by competing with England by industrializing, but by freeing the world from the "domination of industry" in general.<sup>341</sup> ...

As a consequence, Marx saw little to choose between developmental strategies. He recommended free trade and laissez-faire to less-developed economies only because under their auspices the contradictions of modern industrial society would mature most rapidly — accelerating the circumstances that would "eventuate in the emancipation of the proletarians"<sup>342</sup> through abolition of the market. (Gregor, 1995, pp. 136, 137, 138 and 140)

Robert Nisbet supports the interpretation that for Marx the revolution was vitally important. He writes that the ultimate goal was to end Man's alienation, thus making Marx' dislike of industry understandable,

For Marx, as for Rousseau, there is always implicit a conception of man as containing naturally within himself sentiments and faculties which, over the course of social develop have become alienated from him and vested in external institutions. Revolution is the only means by which the end of this alienation can be effected and man's faculties returned to him. Hence the vital political function of revolution in Marx's thought. (Nisbet, 1966, p. 137)

We may therefore claim that whereas List focused on gradually improving practical circumstances by promoting industry and markets, in order to elevate civilisation and individual freedom, Marx went the opposite way. He focused on the psychology of alienation and in principle promoted social chaos, in order to remove economic markets and install a political singular rule of society, by the omnipotent state.

In short: List was a pragmatic reformist, whereas Marx was a utopian revolutionary, - and List promoted regulated Capitalism, whereas Marx promoted dictatorial Communism (Cf. Marx, 1848).

---

<sup>341</sup> 40. Marx, "Draft of an Article on Friederich List's Book *Das Nationale System der Politischen Oekonomie*," in MECW, vol. 4, 283. (Gregor's note)

<sup>342</sup> 56. Engels, "The Free Trade Congress of Brussels," in MECW, vol. 6, 290. (Gregor's note)

## 5.12 The bureaucratic pitfall

Unlike the English Classical School, the Historical School had a sharp focus on institutions, much due to its attention to and promotion of regulation – in the Cameralist tradition. This attention was also due to contemporary Marxism's quest for a unitary and omnipotent state, thereby dominating Civil Society entirely.<sup>343</sup>

The German Historical School could draw on criticism of such opinions from the Conservative tradition, but not only this; The heydays of the German Historical School in economics, of Wilhelm Roscher to Werner Sombart, happened to coincide with the heydays of political Anarchism and Syndicalism within the expanding Labour movement.<sup>344</sup>

In the chapter 'Authority and Science',<sup>345</sup> the Russian Prince and Anarchist Mikhail Bakunin argues against trusting any authorities, be it imperfect scientists or political representatives, arguing that the various privileges both enjoy will soon corrupt and deprave both of their genius, and thus enslave the population under incompetent rule.<sup>346</sup>

Similarly, in 1919 Rudolf Steiner criticises such over-extension of the State's role and argues that Lenin's rule

... is the whole essence of tsarism, only extended for another class, that is, tsarism continued in a worse manner. (Steiner, 1919, p. 114)<sup>347</sup>

---

<sup>343</sup> In his *Communist Manifesto*, Marx argues for departmental bureaucratic rule of industry and finance (Cf. Marx, 1848).

<sup>344</sup> Roughly from the 1850s to the 1920s, from Pierre Proudhon over Mikhail Bakunin and Piotr Kropotkin to Enrico Malatesta and Ferdinand Pelloutier.

<sup>345</sup> In the posthumously published book, *God and the State* (1871), which Bakunin originally titled *The Historical Sophisms of the Doctrinaire School of Communism*.

<sup>346</sup> Bakunin writes, "It is the characteristic of privilege and of every privileged position to kill the mind and heart of men. ... A scientific body to which had been confided the government of society would soon end by devoting itself no longer to science at all, but to ... by rendering the society confided to its care ever more stupid and consequently more in need of its government and direction.

But that which is true of scientific academies is also true of all constituent and legislative assemblies, even those chosen by universal suffrage. In the latter case they may renew their composition, it is true, but this does not prevent the formation in a few years' time of a body of politicians, privileged in fact though not in law, who, devoting themselves exclusively to the direction of the public affairs of a country, finally form a sort of political aristocracy or oligarchy. Witness the United States of America and Switzerland. Therefore let us have no external legislation and no authority. The one is inseparable from the other, and both tend to create a slavish society." (Bakunin, 1871, pp. 228-229)

<sup>347</sup> Vladimir "Lenin" Ilyich Ulyanov and his henchman Lev "Trotsky" Davidovich Bronstein followed up Marx by subjugating, even as vital parts of modern Civil Society as trade unions, under the benevolent yoke of the party leadership's omniscience. Attacking the French Syndicalists, Trotsky writes that, "In the trade unions, the Communists, of course, submit to the discipline of the party, no matter what posts they occupy. .... when the movement rises to the

Steiner's prime reason for concern is that the death of independence for Civil Society is also the death knell for freedom of mind, marking the end of creativity and progress.<sup>348</sup> As List, Steiner argues that freedom and progress are linked profoundly.

Bakunin likewise argues that the only way to promote liberty and an efficient and rational organisation of society is to educate the masses in science and the laws of nature.<sup>349</sup> The core lesson from the Anarchist and Syndicalist experience lies in its sharp focus on the fallibility and corruption of authority and bureaucracies; whether public or private; whether political or scientific. The Historical School could learn from tradition's experiences and arguments. And so they did, critically; authority-critical insights of anarchists like Proudhon, Bakunin, and Kropotkin, were noted and elaborated further by several economists in the German Historical School in economics.<sup>350</sup>

### 5.13 Law, regulation and economics

In economics in general, and also law and economics; the general rule of intervention is that as long as there are no externalities, such as transaction costs, there is no reason to interfere politically with economic affairs, nor is there any reason to interfere with contract rela-

---

general strike and still more to the direct struggle for power. In these conditions, the leading role of the party becomes entirely direct, open, and immediate. The trade unions ... become the organizational apparatus of the party ..." (Trotsky, 1929, pp.17-18).

<sup>348</sup> See also the treatment of Steiner's relation to Civil Society and to the unitary state in the section, *Freedom in the German tradition*, in chapter 2.

<sup>349</sup> Bakunin writes of this that, "Once they shall have been recognised by science, and then from science, by means of an extensive system of popular education and instruction, shall have passed into the consciousness of all, the question of liberty will be entirely solved." (Bakunin, 1871, p. 227) With this belief in reason, Bakunin was typical of what Sombart calls the 'rational socialists'. As opposed to 'realist socialists' such as Marx, who were inspired by Conservative theories of 'power' (Cf. Sombart, 1896; 1909 edition, ch. 1 sec. 2).

<sup>350</sup> Such as by the professors Bruno Hildebrand (1848); Franz Oppenheimer (1905); Karl Diehl (1911); Robert Michels (1911); and Werner Sombart (1896, and 1934). As an illustration, Michels has 29 references alone to Bakunin. Nevertheless, in a lengthy discussion of Anarchist criticism of bureaucracy, Michels shows his sharp and independent mind such, "... anarchism, a movement on behalf of liberty, founded on the inalienable right of the human being over his own person, succumbs, no less than the Socialist Party, to the law of authoritarianism as soon as it abandons the region of pure thought and as soon as its adherents unite to form associations aiming at any sort of political activity." (Michels, 1911, p.199)

See also the section, *The inadvisability of supporting manufactures*, in chapter 6.

tions. In the real world, however, transaction costs and externalities are a part, and there is a need to internalise the externalities in economic calculations. In other words, markets do not behave efficiently by their general inherent nature, by themselves alone. Governmental regulation, e.g. of contract relations, is therefore needed in order to correct imperfections and establish efficient market regimes. If not - regulation may rule instead of right - and decrease general efficiency.

Both law and economics, as separate professions, promote general welfare as their ultimate goal, although economists often have claimed to be more "objective" and "scientific", professing value-neutrality. This simplistic positivism is now gradually letting loose, since its heyday in the 1960s. Normally, the goal of legal analysis is perceived as promotion of 'justice'. The goal of economic analysis and of economic analysis of law (law and economics), however, is nowadays perceived as promoting 'economic efficiency', however weak this may be as a measure of general welfare. Therefore, law and economics deals with the efficiency of the legal system and intends to arrange it to further economic efficiency, taking into consideration aspects that normally do not apply to an economic analysis, namely the arrangement of the legal system at large.

We may define the subject of the economic analysis of law, law and economics, as dealing with three questions using economics to predict:

- Which legal rules are efficient?
- The outcome of law (a legal arrangement and system);
- And what the legal rules ought to be.

This boils down to efficiency analysis, and a corresponding choice of various efficiency regimes. The economic analysis defines legal questions in economic terms, mainly as phenomena of rationality and, if possible, phenomena of pricing and effects on pricing from different legal arrangements.

More specifically, some important areas within law, tort and contract problems can be seen as property rights problems and therefore questions of necessary measures as long as externalities such as transaction costs exist. The (long-term) question of tort is a question of pricing; fines, taxes and subsidies, and therefore the kind of intervention preferred. This applies most of all, however, to the Common Law tradition on the basis of the larger room for bargaining within this tradition, than within the Code of Law tradition.

The main assumption of the economic analysis of law is the same as in standard economic theory (in the modern Anglo-Saxon dominated literature), of the rationality of the actors, be they criminals or judges, and of freedom of choice. Any actor has a rational choice regarding his behaviour and its intended outcome. This opens the door for rational manipulation with behaviour, through changes in the structure of incentives presented to the actor, especially monetary incentives. We may therefore use the standard neo-classical toolbox, of marginalism and in particular of Homo Economicus, i.e. rational economic man, meaning

the omnipresent agent of the textbooks. If we, for a moment, accept this "normal" understanding of economics, we may say the following.

Therefore, legal questions of tort and of contracts are in economic terms defined as questions of intervention creating (goal directed and efficient) incentives in order to make individual actors change their behaviour accordingly, thereby benefiting collective welfare. This is done by establishing monetary incentives; fines; taxes; subsidies, and property right structures in general, in order to create efficient markets, which so far has been of performing less than perfect or not at all. This line of reasoning may also pertain to public regulation in general; where the goal is to make markets function efficiently. In practice, or reality, the difference between regulation and law is blurred,<sup>351</sup> and I will deal with these as various practical instances of the same problem: Regulation in general.

### 5.14 Regulation and intervention

Markets do not always function optimally, not for the common good or for the individual actors. They may sometimes therefore be in need of a benevolent 'guiding hand' in addition to the 'hidden hand'. Below we will therefore deal briefly with List's relation to law and economics as well as related issues like transaction costs and public goods.

A core part of List's criticism against Smith and the 'Cosmopolitan School' concerns a lack of differentiation between private interests and public interests.<sup>352</sup> List repeatedly argues that private interests differ from national interests, and that unfettered markets cannot take care of national interests. National interest therefore requires an active state. List accordingly writes, that when dealing with many difficult issues, having one common political administration is of great value,<sup>353</sup>

The advantages of their confederation under one and the same political Power in times of war, of national differences, of commercial crises, failure of crops, &c., are not less perceptible than are the advantages of the union of the persons belonging to a pin manufactory under one and the same roof. (List, 1841a, p. 151)

In other words the state, and its multifarious policies of regulation, is part of the productive forces. Also earlier and later economists in the German tradition explicitly pointed to regulation and to the state as core parts of the productive forces. Adam Müller considered the state as the most important type of capital of a nation, (Cf. Müller, 1808-1809)

Also Wilhelm Roscher points out the immaterial aspect,

---

<sup>351</sup> A basic difference is that of the right to appeal which is stronger within the legal framework than within the regulative framework.

<sup>352</sup> See also the sections, *Public regulation of the merchant interest*; and *Differentiate private versus community interests* in chapter 3.

<sup>353</sup> The lack of which can be observed in Europe today...



The state itself is the most important incorporeal capital of every nation, since it is clearly indispensable, at least indirectly, to economic production. ... (Roscher, 1877, § 42, p. 154)

Like the Cameralists before him, List defined his profession as a duty to direct and regulate in search of perfection,

National economy teaches by what means a certain nation, in her particular situation, may direct and regulate the economy ... to create ... perfect nations ... (List, 1827b, Letter I, pp. 25)<sup>354</sup>

Along with the philosophers of German Idealism from Cusa and Leibniz, to Kant, Fichte and Hegel, List sought primarily to promote legal arrangements that would improve prevalent social matters, and prepare for improvements in the future.<sup>355</sup>

### **5.15 List's relation to Law and Economics**

The prime instrument in List's socio-economic strategy was the legal system. The relation between law and economics is the practical core of his world of ideas and economic efficiency is one goal for his efforts to reform the legal system.

Changing legal regulations promotes social progress, however hard the political and bureaucratic battles. This was probably only natural and logical to List, since he was educated in accounting and law and had practised within the administrative and parliamentary system, first as a junior and later as senior tax clerk; then as a student of law; and as a professor of statecraft. He then practiced within law making as a Member of Parliament in Württemberg.

Legal reform was the essence of List's reform plans as a local civil servant in Württemberg and the essence of his reform plans as a journalist, consultant and politician for a German, European and Global legal and economic system.

In List's definition of the national productive powers, he mentions the material factors, but first he mentions the immaterial factors, which incorporates institutional factors like laws and institutions,

---

<sup>354</sup> Here is an expanded quotation: "National economy teaches by what means a certain nation, in her particular situation, may direct and regulate the economy of individuals, and restrict the economy of mankind, (9) either to prevent foreign restrictions and foreign power, or to increase the productive powers within herself; or, in other words, how to create, in absence of a lawful state, within the whole globe of the earth, a world in itself, in order to grow in power and wealth to be one of the most powerful, wealthy, and perfect nations of the earth, without restricting the economy of individuals and the economy of mankind more than the welfare of the people permits. " (List, 1827b, Letter I, pp. 25)

<sup>355</sup> See also the section, *Perfecting the State*.

The productive powers of a nation are not only limited by the industry, thrift, morality, and intelligence of its individual members, and by its natural resources or material capital, but also by its social, political, and municipal laws and institutions, and especially by the securities for the continued existence, independence, and power of the nationality. (List, 1841b, *Introduction*, translated and reprinted in Hirst, 1909, p. 306)

Laws are institutionalised conventions, and although institutions have material aspects like buildings, the essence of institutions are immaterial. List here points to various aspects of the immaterial factors. List is, as usual, somewhat hazy on definition, but the basic intuition is clear.

List was throughout his life devoted to the issue of arranging first the (national and international) legal system to serve economic efficiency, in the interest of the common good.

List argues against J. B. Say, a critical French follower of A. Smith, that law and institutions do matter,

Every law, every public regulation has a strengthening or weakening effect on production or on consumption or on the productive forces. (List, 1841a, p. 307)

The prosperity of a nation is not, as Say believes, greater in the proportion in which it has amassed more wealth (i.e. values of exchange), but in the proportion in which it has more developed its powers of production. Although laws and public institutions do not produce immediate values, they nevertheless produce productive powers, and Say is mistaken if he maintains that nations have been enabled to become wealthy under all forms of government, and that by means of laws no wealth can be created. (List, 1841a, p. 144)

In the following quotation, List emphasises the importance of liberty, law and administration. At the same time, it is yet another example of how List thoroughly emphasised the importance of immaterial factors of production,

In order duly to estimate the influence which liberty of thought and conscience has on the productive forces of nations, we need only read the history of England and then that of Spain.

The publicity of the administration of justice, trial by jury, parliamentary legislation, public control of State administration, self-administration of the commonalties and municipalities, liberty of the press, liberty of association for useful purposes, impart to the citizens of constitutional states, as also to their public functionaries, a degree of energy and power which can hardly be produced by other means. We can scarcely conceive of any law or any public legal decision which would not exercise a greater or smaller influence on the increase or decrease of the productive power of the nation. (2)<sup>356</sup> If we consider merely bodily labour as the cause of wealth,

---

<sup>356</sup> 2. Say states in his *Economie Politique Pratique*, vol. iii. p. 242, 'Les lois ne peuvent pas créer des richesses.' Certainly they cannot do this, but they

how can we then explain why modern nations are incomparably richer, more populous, more powerful, and prosperous than the nations of ancient times? [footnote on J.B.Say] (List, 1841a, p. 139)

In List's note (2), he states that the laws certainly do not create wealth,

... but they create productive power, which is more important than riches  
... (List, 1841a, p. 139n)

List's stress on freedom (of expression for the press etc.) and universality of law (jury trial etc.) can be seen as attempts to correct imperfections of the market for ideas and entrepreneurship, through vested interests and power structures. Through his libertarian ideas, he intended to establish an efficient market for ideas, for innovation and for entrepreneurial activity. His work for security of property and for protection of investments can likewise be seen as intended to establish a market for innovation and for entrepreneurial activity, whatever the field, and all intended to secure an efficient working economy to the benefit of general welfare.

For List, there was no great conflict between justice and efficiency since justice would serve efficiency, and vice versa. He did not see any contradiction between these legal and economic purposes and, quite on the contrary, argues that only a free and just legal system could mobilise the mental powers of the individual citizen, in particular as entrepreneur, crucial to economic development. He argues that injustice was a major reason for existing economic problems. The most obvious example might be List's repeated attacks on the institution of slavery in the southern states of the United States (Cf. List, 1827b, Letter VI, pp. 86-87; 1837a, p. 184; 1841a, ch. 17, p. 200; p. 416).

Looking at much of List's agenda against the bureaucracy; freedom of expression; accountability; jury trial, he might at first be mistaken for a modern Liberal. His opinions on the spiritual origin and character of wealth and prosperity and on the corresponding need for moderate and differentiated regulation make most of the difference. The ultimate goal for List was of an immaterial and moral nature, and closely related to law. The prime instrument and crucial tool and lever of his plans for a more humane and efficient economic system was, in fact, law and regulation.

List is also very aware of the need for international legal arrangements in order to promote peaceful agreements, and prevent the primitive right of the strongest to dominate.<sup>357</sup>

Here we also see an example of the germ of the German preoccupation with free trade and freedom of the seas, in the sense of equal rights to all parties to trade freely, thereby opposing the dominant British sys-

---

create productive power, which is more important than riches, i.e. than possession of values of exchange. (List's note)

<sup>357</sup> Cf. the sections, *A universal confederation of nations*; and *Promote free trade by international law, treaties and congresses*, in chapter 7.

tem of preferential trade within the Empire as such and the more informal Empire, where countries and even empires with their own colonies were informal subjects of Britain. List writes,

Thus the question as to whether, and how, the various nations can be brought into one united federation, and how the decisions of law can be invoked in the place of military force to determine the differences which arise between independent nations, has to be solved concurrently with the question how universal free trade can be established in the place of separate national commercial systems. (List, 1841a, p. 114)

National and international legal arrangements were also the main preoccupation of his forerunners in Germany, like Cusa, Leibniz, Wolff,<sup>358</sup> Kant, Hegel and Fichte, who all contributed considerably on the issue. These German authors all belong to the tradition of natural (rational) law, code of law as opposed to common law, but to the idealist faction that adheres to Thomas Aquinas' verdict that the ultimate duty of Man is moral perfection.

Thomas Hobbes, followed by John Locke, dominated the opposed materialist faction of this tradition of natural law. They saw biological survival, or self-preservation, as Man's ultimate duty.

List's ideas are scarcely noticed among students of law and economics, in spite of their close affinity to the law and economics approach. List insights may qualify him as an important forefather of the law and economics profession.

### **5.16 List's approach versus Law and Economics**

Some characteristics of List's approach resemble modern law and economics analysis and some elements distance him from this type of analysis. There is a lot to learn from List's insights for students of law and economics, as well as for students of history, development, communication and innovation. If analysed in modern economic language, this would have been more obvious. Distancing him from the pricing inclination of the law and economics tradition would be his emphasis on the immaterial production factors.

Another and related factor would be his corresponding dislike of the Values of Exchange school of Adam Smith working mainly with the monetary aspect of economics, that is to say with the trade aspect, and far less with the productive and creative aspect. List criticized Smith explicitly and repeatedly on this point (for example, List, 1841a, ch. 12 – 'The theory of the powers of production and the theory of value').

---

<sup>358</sup> See, for instance, Christian Wolff's *Jus Gentium*, ch. 1: 'Duties of nations to themselves and the rights arising therefrom' for instance paragraph 35: 'Of a nation's duty to perfect itself and its form of government' and paragraph 51: 'How far this applies to the ruler of the state'. (Wolff, 1749)

List regarded the factors that cannot be priced on a market, in particular the immaterial aspects, as the most important factors - for the generation of both prosperity and the elevation of culture (Cf. List, 1827b, pp. 59, 63, 67; 1841a, ch. 12 – ‘The manufacturing power and the personal, social and political productive powers of the nation’). To him market prices were only one practical instrument among many, as part of a larger plan concerning the ultimate goal, the elevation of human culture. List might have been critical of several characteristics of modern law and economics. This would most likely concern the act of pricing legal arrangements, since List had been trained in the code of law tradition of the Continent, where you do not bargain over (semi-religiously) given legal “axioms”. On the other hand, List devastatingly criticises precisely the Roman legal tradition, which gave birth to the Code of Law tradition during the first republic. List would probably also have been somewhat critical of the assumption of freedom of choice within Law and Economics, since he was aware of path dependencies created by historical power structures.

Nevertheless, the above characteristics of immaterialism and power also constitute factors, which unite List with the law and economics tradition. Reminding us of the law and economics approach is List’s emphasis on a policy, which uses governmental regulation and law making concerning, for example, competition, privileges, taxation and subsidies to promote long-term efficiency in the legal system and furthermore within the economic system.

### **5.17 Incentives from law and regulation**

In the 21<sup>st</sup> Century, with the ever-increasing focus on the "new" "knowledge-economy" and the “new” "information-economy", List’s emphasis on the immaterial gives his ideas a major edge as opposed to the materially oriented school that followed Adam Smith, the Smith-Ricardo-Mill-Marshall tradition. Comparing the emphasis made by these authors on knowledge, science, and communication (formerly labelled as “transport” -of ideas and information) makes this rather obvious. This issue seems has major implications for the understanding of economics of growth.

List paid much attention to the role of incentives in economics, and to how these could be promoted by regulative and legal arrangements. He thoroughly discussed the incentive structure in many aspects, for instance regarding tax incentives, and regarded it as crucial for entrepreneurship and the promotion of the mental powers of production. He actually devoted a whole chapter to this in his *National System* (Cf. List, 1841a, ch. 25, *The manufacturing power and the incentives to production and consumption*, pp. 303 ff). He argues that all regulations have effects on production and consumption and patent laws were one legal measure for promoting the mental powers of production (Cf. List, 1841a, pp. 56, 307),

Every law, every public regulation, has a strengthening or weakening effect on production or on consumption or on the productive forces.

The granting of patent privileges offers a prize to inventive minds. The hope of obtaining the prize arouses the mental powers, and gives them a direction towards industrial improvements. It brings honour to the inventive mind in society, and roots out the prejudice for old customs and modes of operation so injurious among uneducated nations. It provides the man who merely possesses mental faculties for new inventions with the material means which he requires, inasmuch as capitalists are thus incited to support the inventor, by being assured of participation in the anticipated profits. (List, 1841a, p. 307)

Reminding us of the role of the US until very recently, List wrote,

By means of her patents laws, England long monopolized the inventive genius of every nation. (List, 1841a, p. 56)

Like tariff protection, patents secure a reward for investments, and therefore act as a weaker and temporary form of property rights,

Protective duties act as stimulants ... . They guarantee a reward ... (List, 1841a, p. 307)<sup>359</sup>

Since List regarded the mental powers as the bedrock of development, his emphasis on the entrepreneurial aspect to which the legal system is crucial, is only logical. This makes the incentive and legal system even more crucial for development in his scheme than it could ever be in the so-called 'classical' 'orthodox' and 'neoclassical' economic tradition.<sup>360</sup>

Law and economics today, deals specifically with the possibility of changing the incentives structure, but mainly within the standard economic image of Man, as purely self-interested, i.e. egotistic and in essence asocial.

List's Idealistic approach deals especially with the incentives structure, due to his wider image of economic realities and conception of Man. See List's *National System*, chapter 25: *The Manufacturing Power and the Inducement to Production and Consumption*. Moreover, do notice the word 'inducement', illustrating List's critical awareness of the importance of this issue. This implies that the Cosmopolitical School of economics has a narrower and therefore more unrealistic conception of Man and therefore of reality, as noticed e.g. by Windelband and

---

<sup>359</sup> See an expanded quotation and discussion on this in the section, *Protection furthers security, freedom, and incentives*, in chapter 6. See also the following section, *Protection promotes foreign investment*, in chapter 6.

<sup>360</sup> The same relation has been noted above regarding the emphasis and role of regulations and the public bureaucracy, for instance concerning the morals of the bureaucracy.

Schumpeter (Windelband, 1896 pp. 513-523; Schumpeter, 1912, p. 87), errors of which also modern law and economics is prone.

With List, Man is considered to be fundamentally- and potentially-, rational and moral, spiritual and social - in combination, and in addition to being self-interested. One important effect of this is that List acknowledged regulation as a possible way of improving society. This is in fact also the case with Adam Smith, who in his *Moral Sentiments* not only praises intervention,<sup>361</sup> but also supports the ideas of perfection.<sup>362</sup> In his *Wealth of Nations*, Smith's inclinations were otherwise tilted. However, if a hedonistic and "power-cynical" view is carried through consistently, then any kind of 'regulation' can only be regarded as self-serving – it can only serve the regulator himself – and thus regulation must be combatted.

The irony is that although such ideas pretend to be 'realistic', that may be precisely what they are not. The logic of the argument consistently carried through would even preclude organisations as such, since any leadership would be self-serving. One may e.g. counter-argue that leaders of a private public company are held to reckon by the board, so that the principle of self-serving does not rule out organisations in general. However, this counter-argument would also apply for regulation, as when a government stands trial before the electorate at the next election. This is not to deny the fact that the self-serving tendency exists, but rather to emphasise that it is only one factor among many. Furthermore, the definition of self-serving or self-interest is open, it may well include e.g. law-abiding social honour.

## 5.18 List and the public interest

The problem of potential under-investment and overuse of public goods, as well as the need for collective action, has been recognised by practically oriented people from the beginnings of civilisation. Many marvels of the ancient world would never have been built otherwise, ordered by ancient rulers of government and religious leaders, such as canals (Egypt, 4000 BC); sewers (Sumeria, 4000 BC); alphabet (Sumeria, 3500 BC); irrigation (India and Egypt, 3000 BC); aqueducts (Assyria, 700 BC); roads (Persia, 522 BC); and the library and light house in Alexandria (Egypt, 250 BC) - of which many are mentioned in W. R.. Corliss' encyclopedic book *Ancient Infrastructure* (Cf. Corliss, 1999).

---

<sup>361</sup> Cf. Smith, 1759, part IV, chapter I, § 11, and p. 185 in Liberty Classics' edition. See quotation in the section, *Smith as regulator and protectionist*, in chapter 7.

<sup>362</sup> Cf. Smith, 1759, part VI, sec. II, ch. II, § 18, and p. 234 in Liberty Classics' edition. See quotation in the section, *Smith as regulator and protectionist*, in chapter 7.

Although important in practice, the issue of public goods was long disregarded in theory. Economic theoreticians have not always been so practically minded, and have often disregarded the necessity of such investments. Historically it is only human; one tends to disregard what is not seen as a problem: In a coastal and humid state like Great Britain in particular, who may utilise the natural waterways as infrastructure, there has been a tendency to disregard the problem. There is also a marked tendency of economically mature nations to disregard the problem as they too can take the infrastructure for granted; it does no longer constitute a major problem, for instance concerning the issues of trust and credit. An issue is noticed, however, whenever it returns as a problem.

Although, even Adam Smith and Jeremy Bentham pointed to the necessity of intervention in several instances, it was to a larger extent left to the economists of the emerging industrial powers to focus more closely on this problem of potential under-investment in public goods like infrastructure.

German economists like List and Schmoller and American economists like Carey and Taussig are some examples of this Cf. (Cf. List, 1841; Schmoller, 1923; Carey, 1837; Taussig, 1911). This more or less German-American tradition that focused on the establishment and maintenance of infrastructure could still be found to dominate development economics in the period of de-colonisation in the 1950s and the 1960s. (Cf. Nurkse, 1953; Rostow, 1960; Gerschenkron, 1962; Hirschmann, 1967; Senghaas, 1982).

List never used the phrase 'public goods' nor did he explain their basic characteristics – concentrated costs and dispersed benefits (as opposed to those of rent seeking: concentrated benefits and dispersed costs).

Nevertheless, his criticism of Smith does in practice take as its crucial and given point of departure the difference between private and public interests, and indirectly thereby, the difference between private and public goods.

As with his advocacy of knowledge-based production, he never seemed to develop a thorough and analytical theory on this issue, but his defence may be that neither had anybody else developed these concepts thoroughly at this historical point.

List often criticised the radical free market school for their materialistic and anti-social individualism, which he claimed would be destructive to communities - in opposition to his own (idealistic &) socially oriented individualism. (Cf. List, 1841a, ch. 14, pp. 169-171)

List's criticism against the Cosmopolitan School could have been regarded as a criticism of the passivity of private entrepreneurs, but keeping the incentives structure in mind, this would not have been a just charge, since after all the main task of individual "micro" entrepreneurs is staying alive as such. List did not make this charge. Rather, he



praised the entrepreneurs – the micro actors - for their initiatives (Cf. List, 1837a, p. 62).

Therefore, he often charged directly against the "macro" entrepreneur's passivity, i.e. governments with long-term responsibility for the entirety: They did not fulfil their task of promoting an efficient national economy - by using its tools of regulation and law making to this purpose, national efficiency being a prime goal of the nation state as such. List's insistence of the necessity of governments to initiate investments into innovative production and -infrastructure, read large, was based on his experience with insufficient or even lacking private investments into such public goods areas. Shortsightedness was in various ways also the target of his criticism, concerning passivity of governments regarding such initiatives.

### **5.19 Jurisprudence's obligation to counter vested interests**

List calls for 'progress', and warns against obstacles to progress, such as vested interests in established solutions. Implicit in his argument, there is therefore an obligation of law and economics to counter vested interests against inventions & resulting change of social basis for power. List writes,

Notwithstanding an absence of liberal institutions may be extremely injurious to a full development of the productive powers of the nations, some classes may find their reckoning in this bad state of things. The country may suffer from an absence of manufacturing industry, but some people may flourish in selling foreign manufactures. Canals and railroads may do great good to a nation, but all waggoners will complain of this improvement. Every new invention has some inconvenience for a number of individuals, and is nevertheless a public blessing. (List, 1827b, Letter VI, pp. 86-87)

One might counter that sometimes inventions are a blessing to individuals and an inconvenience to the public. In particular, this is true if one limits one's perspective to the negative aspect of inventions, which most inventions will have, such as accidents from automobiles. Nevertheless, List's view is fertile.

Like A. Smith before him, regarding merchants' conspiracy against the public (Smith, 1776, ch. X, Part ii) and T. B. Veblen later on similar issues in *On the natures and uses of sabotage* (Veblen, 1919, pp. 9-20), List was very well aware of the sabotage of the public interest that individual capitalists were willing to undergo in service of their own interests.

As hinted to above, List was a keen observer of power and of social structures, and therefore also of the implications of entrepreneurship for established power structures. Inventions are a critical threat to many parts of establishments, since ultimately relative monopoly and

control of some resource is the foundation of any power.<sup>363</sup> Technological change and economic growth imply change, and therefore a restructuring of the power base, sometimes even on a vast and global scale. They can enforce established powers and they can weaken them. Choice of technology is therefore not neutral but rather highly political, just like choices of law and of organisational structure.

Although possibly beneficial for the majority of a society, such change may be detrimental to some parts of the establishment, which in consequence, will try to use its dominant position to block change before it is too late, thereby cementing the structure of society and the economy, resulting in stagnation, eventual decline, sudden revulsion and upheavals. Hegel and Marx have described in a similar way the dynamics of social life with their theory of dialectics. It is thus of crucial importance for the survival of a community and eventually of a civilization, that such impeding behaviour is prevented and that a dynamic flow of change is permitted to take place. The question of which social powers to promote or restrict, and accordingly in which directions technology changes should flow, is however, a far more complex and difficult question, doomed to be the object of intense lobbying activity. This line of reasoning applies on the local national level as well as to the international community. This problem, in particular, makes law and economics a crucial field of study and its students here have a crucial obligation to the general public.

Externalities like vested interests and power structures create transaction costs that render markets inefficient. This is a central theme of law and economics, which gives us yet another reason to claim that List should indeed be regarded as one of the important forerunners of law and economics. For List, power was at the core of economics and economic policy, both as a result and as a prerequisite. This was the source of one of his major criticisms of Adam Smith, who generally and conveniently avoided this aspect in his writings, well aware as he was that the current power structure favoured England.

List is wrong, however, in writing that Smith totally excluded this dimension, but it may be more right when speaking of his followers. Smith sometimes, contradicting other statements of his, was an ardent supporter of government intervention (Cf. Smith, 1759, part IV, chapter I, § 11, and p. 185 in Liberty Classics' edition). He was therefore also a firm admirer of military activity and of protection, as the 'Act of Navigation' illustrates and as List himself also pointed out.<sup>364</sup>

List argues that temporary national protection will lead to fiercer competition and a more efficient global economy at a later stage. Thus

---

<sup>363</sup> This resource can be material, and it can be ideal (mental/ technological/ cultural/ institutional/ organisational) and occur on a local scale as well as on a global scale. Nevertheless, the ultimate sources of social power are mental: First of all, "individual" factual knowledge and abilities and secondly, the mental structure of "fictions" somehow imposed and reinforced upon a collective, whether religious and/or social, regarding e.g. hierarchy and property.

<sup>364</sup> See the section, *Smith as regulator and protectionist*, in chapter 7.

List's fight for the employment of legal arrangements for protection matches the agenda of law and economics, seen from a larger perspective. Indeed, List's concept of economics was in some profound ways wider-reaching than today's mainstream Law and Economics.

## **5.20 List's contribution to law and economics**

List's approach, establishes him within this tradition of Law and Economics and its analysis of transaction costs. From his youth, when List worked as a clerk in a local tax administration, his proposals were practical and intended to remedy faults with the administrative practice. In other words his approach and work was from the outset a merge of law and economics.

Concerning List's specific contribution to law and economics, or the economic analysis of law, there is a time span to consider which makes it obvious that List was working with slightly different problems and concepts than modern theoreticians in this area, in both theory and practice. The basic principles remain more permanent, however contemporary the implementation may be.

List wrote a book on treatment of marriage within Roman law, 'Outline of Roman Law, a pedagogic attempt' (*Grundriss des Römischen Rechts, ein pädagogischer Versuch*). The date of publication is still not known, but it is probably written in his early years and published later (List, 1911). He later damned the influence of the Roman law, since it caused confusion and undermined the liberty of the common man. It introduced secrecy in public affairs and an unhealthy division between the learned and the common man, since the law was foreign to the common man,

The introduction of the Roman law weakened no nation so much as the German. The unspeakable confusion which it brought into the legal status and relations of private individuals, was not the worst of its bad effects. More mischievous was it by far, in that it created a caste of learned men and jurists differing from the people in spirit and language, which treated the people as a class unlearned in the law, as minors, which denied the authority of all sound human understanding, which everywhere set up secrecy in the room of publicity, which, living in the most abject dependence and living upon arbitrary power, everywhere advocated it and defended its interests, everywhere gnawed at the roots of liberty. Thus we see even to the beginning of the eighteenth century in Germany, barbarism in literature and language, barbarism in legislation, State administration and administration of justice; barbarism in agriculture, decline of industry and of all trade upon a large scale, want of unity and of force in national cohesion; powerlessness and weakness on all hands in dealing with foreign nations. (List, 1841a, p. 80)

Neither here does List break completely new ground, since Hegel had discussed the foreign influences on German culture before List. Rudolf

Steiner agrees that Roman law critically undermines freedom and economic efficiency in a modern society, because it is in principle static and thing-oriented - instead of being dynamic and ability-oriented. In their treatment of Steiner's socio-economic ideas, Arno Daastøl and Johannes Hanel write,

The traditional concept of property rights is a remnant of Roman law, which functioned in a relatively static, stationary society. Accordingly, this judicial system is static and thing-oriented, in a way that rights are seen as rights to things - property. Today's society is precisely not characterized by the individual's stable relations to her soil, but by the individual's changing functions in society. Our time is distinguished by rapid changes both in skills and structures and should accordingly have a concept of rights adapted to this. In many cases, a dynamic concept of property rights oriented toward the functions required in a globalized economy can be realized as tenure by lease or user rights. (Daastøl and Hanel, 2011, p.131)

Apart from numerous reports, List later wrote at length on the importance of agricultural reform for democratisation and industrialisation. A pioneer paper on land reform from 1842 is List's 'Agricultural constitution, small business and emigration' (*Die Ackerverfassung, die Zwergwirtschaft und die Auswanderung*, List, 1927-36, vol.5, pp. 418-547). This is a layout of legal reforms in agriculture necessary for higher efficiency in agriculture, higher revenue and therefore surplus for investments in industrialisation. But the political aspect of the agricultural constitution was as important. The Japanese and Korean reforms are examples of industrialisation starting with land reform. In both countries, the works of List were well known.

Marx copied large portions from both this work and from 'The National System' (Cf. Lenz, 1930, p. 15). Karl Marx writes favourably on List such,

F. List remarks correctly: "The prevalence of a self-sufficient economy on large estates demonstrates solely the lack of civilisation, means of communication, domestic trades and wealthy cities. It is to be encountered, therefore, throughout Russia, Poland, Hungary and Mecklenburg. Formerly, it was also prevalent in England; with the advance of trades and commerce, however, this was replaced by the breaking up into middle estates and the leasing of land." (*Die Ackerverfassung, die Zwergwirtschaft und die Auswanderung*, 1842, p. 10.) (Marx, 1867, Vol. III Part VII, *Revenues and their Sources*, Chapter 52, 'Classes')

In this work, List spells out the necessary reforms in order to create the political preconditions for a modern representative parliamentary system. The civil liberties of this system were supposed to allow creation of an urbanised and industrial society.

List advised a golden middle road, creating a class of independent middle-class farmers instead of the British capitalist large-scale type of agriculture.

This long ignored work is an early systematic work in the historical tradition (with its empirical methodology as opposed to the rationalist introspective methodology of the classical British school).

In List's comparative country study, he elaborates on the ideas of the Cameralist, Justus Möser and thereby establishes himself as a pioneer in historical jurisprudence, since he made a comparative country study of law before most of the accepted forerunners.<sup>365</sup> Furthermore, List and the tradition of historical jurisprudence are both accepted as main forerunners for the important (Ethical-) Historical School in economics.

### **5.21 Law, individual freedom and democracy**

To Friedrich List, legal action was all the more important a tool, because of the restrictive effect law has to the potential randomness and excesses of the bureaucracy – and precisely this was Leibniz' leading idea in his work on legal issues 150 years before List (Annens, 1983, p. 211). Therefore List favoured the jury system. Precisely because he insisted on the important role of regulation, he had all the more reason to be critical of the behaviour of the bureaucracy – like the main thrust of the Ethical-Historical School in economics, including Max Weber in particular. List's personal experiences underline this point.

List strongly favoured solid legal arrangements as beneficial to economic progress,

... nations in the enjoyment of a good constitutional government succeed better than others in industry, commerce and navigation. (List, 1841a, US translation, 1856, p. 374; slightly different translation in the English translation, 1884, p. 295)

And in his Philadelphia speech, List says,

How weak the opposite cause is, she may learn from the reasons they allege, of which the principal is a want of constitutional power. (List, 1827d, p. 285)

In his *Sergei Witte and the Industrialisation of Russia*, the Harvard Professor Theodore von Laue describes how List deeply admired the English liberal political and cultural system (and how the Russian PM, Sergei Witte, was unable to follow up),

Friedrich List, as a liberal, took over the English model in its totality. Empire, parliamentary constitution, industrialization, religious toleration—these qualities constituted civilization itself. All this was far more than Witte could offer. (Laue, 1963, p. 62)

---

<sup>365</sup> Such as Maitland, Taine, Dopsch, Below, Gierke, Brunner, Vinogradoff, but with the exception of Savigny and Eichhorn

List argues that the most important factors of administration are stability and safeguarding of personal liberty and property,

But that in no way proves that people have become rich, i.e. have attained the highest degree of economical well-being, under all forms of government. History rather teaches us that such a degree of public well-being, namely, a flourishing state of manufactures and commerce, has been attained in those countries only whose political constitution (whether it bear the name of democratic or aristocratic republic, or limited monarchy) has secured to their inhabitants a high degree of personal liberty and of security of property whose administration has guaranteed to them a high degree of activity and power successfully to strive for the attainment of their common objects, and of steady continuity in those endeavours. For in a state of highly advanced civilisation, it is not so important that the administration should be good for a certain period, but that it should be continuously and conformably good: ... (List, 1841a, pp. 333-334)

## 5.22 A pragmatic social-conservative?

On the background of List's (1) pragmatic treatment of political representation and of regulation and tariffs in particular, it is more appropriate to place List in the Conservative tradition than in the Liberal tradition.

List's (2) pronounced valuation of civil society, 'the confederation of Labour' and its manifold institutions, strengthens this view - as opposed to the low valuation of civil society in the Marxist and Liberal traditions.<sup>366</sup>

Similarly (3) Conservative preference for local and individual 'variation' over Liberal and Marxist preference for 'equality', corresponds with List's liking for individual differences.

Furthermore, List (4) regards the freedom and opportunity to level as a social driver for individual exertion, and he expressly understood that this presupposes initial variation and inequality. – This, as opposed to the emphasis on equality within the Liberal and Marxist traditions.

This view is further strengthened, when his (5) emphasis on social concerns is noticed; referring then to Conservative politicians with a social-conservative agenda, like the beacons and icons of such policies; Edmund Burke, Benjamin Disraeli, Joseph Chamberlain, Otto von Bismarck, Abraham Lincoln, and Sergei Witte – and again this contrasts with the (radical) Liberal materialist and often quite cynical tradition after John Locke (and Hobbes).

And finally, List's (6) stress of the need for stability and slow and gradual reforms anchors him in the Conservative bay.

In total, therefore it seems most appropriate to place List in the Conservative tradition, with the somewhat unnecessary epithet 'social': List

---

<sup>366</sup> Cf. the sections, *Hegel's liking for Civil Society*; *Conservative liking for Civil Society*; and *Marx's dislike of Civil Society*.

was a Social-Conservative, with the high regard for individual freedom and variation that this entails.

As argues above,<sup>367</sup> List spells out the necessary reforms in order to create the political preconditions for a modern representative parliamentary system. The civil liberties of this system were supposed to allow creation of an urbanised and industrial society.

Generally speaking, List maintains that steadiness is a prime concern for a nation, and that such steadiness will only take place in those political systems that allow the representation of all national interests,

Only under those political constitutions in which the national interests are represented (and not under an absolute Government, under which the State administration is necessarily always modified according to the individual will of the ruler) can such a steadiness and consistency of administration be secured, as Antonio Serra rightly observes. (List, 1841a, p. 334)

It is a matter of debate how such representation is best handled.<sup>368</sup> List continues by adding that even an *absolute* government may in some instances be preferable, in order to secure a stable and progressive administration,

On the other hand, there are undoubtedly certain grades of civilisation in which the administration by absolute power may prove far more favourable to the economical and mental progress of the nation (and generally is so) than that of a limited monarchy. (List, 1841a, pp. 334-335)

As has been shown above,<sup>369</sup> List promotes freedom with great fervour and may hardly be blamed for supporting authoritarian regimes, in principle. At the same time, List had a pragmatic view not only regarding taxation and trade, but also regarding representation. He essentially argues that the government of a people must correspond to the maturity of the people. In this approach, List was followed by e.g. Bruno

---

<sup>367</sup> See the section above, *List's contribution to law and economics*.

<sup>368</sup> Many kinds of political system are based on different arrangements of representation and delegation, reflecting the distribution of experience, knowledge; property, ethnicity, tribes; clans; religions; professions; economic classes; or individual outlook ('political parties').

Some examples (mainly European), are traditional councils of respected elders (always free and often nobles); Germanic and Norse Thing or Folkmote (assembly); Iranian Theocracy; European City States, -Guilds and -Feudalism; English Parliamentarism; Chinese Communism; English Guild Socialism; Spanish Anarcho-Syndicalism; Italian Fascism; or Libyan 'Direct Participatory Democracy' (of Muammar Ghadafi).

<sup>369</sup> E.g. in the section, *The core of List's ideas: Freedom*, in chapter 2.

Hildebrand (Cf. Hildebrand, 1842, pp. 300-301)<sup>370</sup> and by Rudolf Steiner.<sup>371</sup>

List argues that a country's form of government must suit the maturity of its population, and if this is not noted trouble follows; a political system that is too advanced for the population can cause problems,

We are far from desiring to maintain the *absolute* preferableness of any one form of government compared with others. One need only cast a glance at the Southern States of America, to be convinced that democratic forms of government among people who are not ripe for them can become the cause of decided retrogression in public prosperity. One need only look at Russia, to perceive that people who are yet in a low degree of civilisation are capable of making most remarkable progress in their national well-being under an absolute monarchy. (List, 1841a, pp. 333-334)

The difficulties in imposing a one type of political system upon a people that may be ill suited for this system are illustrated with Western recent experiences of intervention in Iraq and Afghanistan.<sup>372</sup> List's point is that a political system must have roots in the people itself. It must have time to grow organically in the minds and habits of the people, and cannot be forced from above or be imported from the "outside". On the other hand, reference to the "immaturity" of a populace has been the ready excuse for many a dictator ... - unwilling to let a people educate themselves to political maturity, however difficult.

### **a) England's constitutional liberties**

When List discusses the roots of English success, List dismisses racial causes by pointing to earlier misery in England, and dismisses the constitutional liberties by pointing to the earlier lack of them. Instead he points to the jury, to the preservation of the common law and to the usage of the English language in administrative affairs. All these three elements were democratic tendencies that contributed to the freedom of the people to participate in public affairs,

Only one jewel out of the treasure-house of freedom was preserved by the Anglo-Saxon-Norman race -- before other peoples of Germanic origin; and that was the germ from which all the English ideas of freedom and justice have sprung -- the right of trial by jury.

---

<sup>370</sup> Cf. quotations in the section, *The Historical School on Capital of Mind*, in chapter 4.

<sup>371</sup> See a discussion of this in the biographic article over Steiner's socio-economic contributions, *Developing Society According to Man's Development* (Cf. Daastoel and Hanel, 2011)

<sup>372</sup> Modern democracy, e.g. the English 'Westminster' parliamentary model or the US model, often fails to work well in traditional societies that are organised along ethnic and tribal lines.



While in Italy the Pandects were being unearthed, and the exhumed remains (no doubt of departed greatness and wisdom in their day) were spreading the pestilence of the Codes amongst Continental nations, we find the English Barons declaring they would not hear of any change in the law of the land. What a store of intellectual force did they not thereby secure for the generations to come! How much did this intellectual force subsequently influence the forces of material production!

How greatly did the early banishment of the Latin language from social and literary circles, from the State departments, and the courts of law in England, influence the development of the nation, its legislation, law administration, literature, and industry! (List, 1841a, p. 50)<sup>373</sup>

List's praise of the English aristocracy is noteworthy. He describes it as approaching meritocracy,

In no European kingdom is the institution of an aristocracy more judiciously designed than in England for securing to the nobility, in their relation to the Crown and the commonalty, individual independence, dignity, and stability; to give them a Parliamentary training and position; to direct their energies to patriotic and national aims; to induce them to attract to their own body the élite of the commonalty, to include in their ranks every commoner who earns distinction, whether by mental gifts, exceptional wealth, or great achievements; and, on the other hand, to cast back again amongst the commons the surplus progeny of aristocratic descent, thus leading to the amalgamation of the nobility and the commonalty in future generations. By this process the nobility is ever receiving from the Commons fresh accessions of civic and patriotic energy, of science, learning, intellectual and material resources, while it is ever restoring to the people a portion of the culture and of the spirit of independence peculiarly its own, leaving its own children to trust to their own resources, and supplying the commonalty with incentives to renewed exertion. In the case of the English lord, however large may be the number of his descendants, only one can hold the title at a time. The other members of the family are commoners. ... It would require a whole volume to show the effect of this institution upon the spirit of enterprise, the colonisation, the might and the liberties, and especially upon the forces of production of this nation. (List, 1841a, pp. 52-53)

Whether the rural oppression was worse in Germany - especially under the eastern 'Junker' class which so often is chastised, than for instance in Great Britain, is questionable. Britain is often been painted in too rosy colours by List. In Britain there was massive oppression following the land reforms which resulted in forced pauperisation (the enclosure movement between 1455 and 1607) and the detested and oppressive Speenhamland poor law (anti-free labour) until 1834. (Polanyi, 1944, ch. 7-9) Civil liberties were a luxury of the wealthy. On the other hand, Württemberg and Prussia had for centuries been among the most

---

<sup>373</sup> Conversely, he blames the contemporary Chinese backwardness on the intricate and demanding Chinese logosyllabic writing technique, which he regards as undemocratic (Cf. List, 1837, p. 69).

liberal states in Europe (MacDonogh, 1994). List seems not to have understood the far-reaching oppression in Britain, his model country, or perhaps this fact does not fit his agenda which is to show the fruitfulness of the Liberal ideology.

List's suggestions for reform in his early years included, in general, proposals intended to make the bureaucracy and the economy function more efficiently and more just, for the benefit of general welfare.

Economic progress was in List's mind inseparable from progress in civilization, which in List's opinion meant a liberal model according to the English experience,

... She has shown us what a free, industrious, and well-governed community can do in this respect within the brief space of half a century, even in the midst of foreign wars. .... The people's innate love of liberty and of justice, the energy, the religious and moral character of the people, have a share in it. (List, 1841a, p. 49, see also pp. 48–52)

Every political movement, every war upon the Continent, brought England vast accessions of fresh capital and talents, so long as she possessed the privileges of freedom, the right of asylum, internal tranquillity and peace, the protection of the law, and general well-being. (List, 1841a, p. 56)

## **b) Russia**

Laue has an interesting comment to Witte's adoption of List in Russia, which supplies us with an interesting perspective of the later adoption in Korea and today's China, Laue writes,

According to the English model, liberty was a prerequisite of industrial progress. In Russia on the other hand, liberty was signally absent. Nor did the Russian ruling class wholeheartedly embrace industrialization and modernization. Friedrich List, as a liberal, took over the English model in its totality. Empire, parliamentary constitution, industrialization, religious toleration--these qualities constituted civilization itself. All this was far more than Witte could offer. (Laue, 1963, pp. 61-62)

In his classic, *Sergei Witte and the Industrialization of Russia*, Laue quotes List's advice that the Russian nobility must understand that it is in their interests to establish equality before the law, and better institutions and communications.<sup>374</sup> Laue writes,

Yet there was one profound catch to the application of Friedrich List's theory to Russian realities, as will appear from List's specific advice to Russia:

---

<sup>374</sup> He mentions Asia in particular thereby indicating the final construction of the Trans-Siberian railroad in 1903, by Witte.

The want of civilization and proper political institutions may prove a great obstacle to the advance of Russia in industry and commerce, unless the Imperial government should succeed in advancing general civilization in accordance with the claims of industry by establishing good municipal and provincial organizations, by first regulating and then completely abolishing all servitude, by improving the methods of interior communication, and finally by facilitating the means of transportation to Asia. Such are the measures which Russia has to accomplish within this century, such is the condition of her further progress in agriculture, manufacturing, industry, as well as in commerce, mercantile navigation, and naval power. But that such reforms may be possible, that they may be accomplished, it is necessary that the Russian nobility comprehend that their material government interests are closely connected with them.<sup>375</sup> (Laue, 1963, p. 61)<sup>376</sup>

Laue continues that List's wholehearted embrace of the English liberal political model found no resonance in Russia,

By 1889 serfdom had been abolished, new municipal and provincial organizations established; the government was improving the methods of interior communication. But these reforms hardly sufficed. The burden of List's thinking was that "nations in the enjoyment of a good constitutional government succeed better than others in industry, commerce and navigation."<sup>[377]</sup> According to the English model, liberty was a prerequisite of industrial progress. In Russia on the other hand, liberty was signally absent. Nor did the Russian ruling class wholeheartedly embrace industrialization and modernization. Friedrich List, as a liberal, took over the English model in its totality. Empire, parliamentary constitution, industrialization, religious toleration--these qualities constituted civilization itself. All this was far more than Witte could offer. (Laue, 1963, pp. 61-62)<sup>378</sup>

Laue writes that Witte's comments excluded List's praise of liberalism,

---

<sup>375</sup> *Ibid.*, p.163. (Laue's note referring to List, 1841a, ch. 9, p. 93)

<sup>376</sup> My British edition is translated a bit differently than Laue's American edition, and includes List's emphasis on establishing a middle class and a free peasant class;

"Meantime, it cannot be denied that the want of civilisation and political institutions will greatly hinder Russia in her further industrial and commercial progress, especially if the Imperial Government does not succeed in harmonising her political conditions with the requirements of industry, by the introduction of efficient municipal and provincial constitutions, by the gradual limitation and final abolition of serfdom, by the formation of an educated middle class and a free peasant class, and by the completion of means of internal transport and of communication with Central Asia. These are the conquests to which Russia is called in the present century, and on them depends her further progress in agriculture and industry, in trade, navigation and naval power. But in order to render reforms of this kind possible and practicable, the Russian aristocracy must first learn to feel that their own material interests will be most promoted by them.

<sup>377</sup> *Ibid.*, p. 374. (Laue's note referring to List, 1841a)

<sup>378</sup> A snippet of this quotation has been used in the section above, *Law, individual freedom and democracy*

In all Witte's comments one will not find a word of List's liberalism nor of the larger social and political implications to Russia of his advice. All the reader would gather from Witte's brochure was that industrial development fostered by a protective tariff would advance civilization in Russia also. But he was warmly directed to consult List himself. One wonders whether List's Russian readers realized that the ideal of industrialization carried with it, in tiny seeds, the ideals of constitutional government and liberty. With Witte these seeds seemingly fell on barren ground. He never ceased to assume that the economic factors of industrial growth could be lifted unharmed from the surrounding social and political tissues and be made to succor autocracy. (Laue, 1963, pp. 62-63)

As we shall see below, this characterisation of Witte is odd, since Laue later describes Witte's strong support for individual freedom and civil rights, forwarded when Witte was the teacher of the tsar's brother,

Starting with the condition of Russian agriculture, he deplored the obstacles to economic individualism created by the communal life of the peasants and praised economic benefits of a system of small individual Holdings, ... Throughout he impressed upon his pupil the advantages of free labor and the respect of individual dignity; 32<sup>379</sup> nothing raised a country's productivity more. ... Nor did the city dumas receive any praise; they were charged with lukewarmness, unscrupulousness, and inefficiency. Witte blamed their shortcomings on the limited suffrage which excluded the educated classes.<sup>33</sup><sup>380</sup> Like a Russian Colbert, Witte criticized the business community for its lack of initiative and its habit of relying on government orders and taking subsidies.<sup>34</sup><sup>381</sup> (von Laue, 1963, p. 190)

Laue also quotes Witte's own arguments for individual enterprise and self-reliance,

But lest the Grand Duke put too much emphasis upon state initiative, Witte warned that the state may inspire but does not create: "The true creators are the citizens."

"The more society progresses, the more complex become all the functions of the productive process and the more difficult will be the role of the people involved in it. In order to fulfil their role they must have not only capital but also the necessary qualifications, the spirit of enterprise, and energy. These grow only on the soil of self-reliance. Not to stifle independent action, but to develop its strength by creating favourable conditions for its application, that is the true obligation which in our time the state must discharge toward our over more complex national economy.'<sup>38</sup><sup>382</sup> (von Laue, 1963, p. 192)

---

<sup>379</sup> 32 Particularly in Lecture X, pp. 101ff. (Laue's note, referring to Witte, 1912)

<sup>380</sup> 33 Konspekt letsii, p. 26, (Laue's note, referring to Witte, 1912)

<sup>381</sup> 34 Ibid, p. 183 (Laue's note, referring to Witte, 1912)

<sup>382</sup> 38 Ibid, p. 132. (Laue's note, referring to Witte, 1912)

In practice, Witte pushed for liberalising reforms. Nevertheless, Witte seems to have been a realist concerning what was politically possible, regardless of what he personally might have wished for. He fought an uphill battle against forces that rejected social compromise between “Labour, Capital and Land”, and the Russian landed aristocracy in particular. In this defeat lies the seed Russia’s sorrow: of the Russian Revolutions of 1905 and 1917; the Bolshevik Coup-d’état; and the chaotic dissolution of the USSR. John Spargo describes Witte’s efforts to modernise Russia and his defeat by the Reactionaries in his, *Bolshevism. The Enemy of Political and Industrial Democracy*,

The strong Council of Workmen's Deputies of St. Petersburg, with which Witte had dealt as though it were part of the government itself, was broken up and suppressed. Witte wanted constitutional government on the basis of the October Manifesto, but he wanted the orderly development of Russian capitalism. In this attitude he was supported, of course, by the capitalist organizations. (Spargo, 1919, p. 37).

After the Bolshevik coup d’état in 1917, independent Civil Society was thoroughly demolished, and organisations were subjugated to Communist Party rule. That means that ordinary people have no one to defend themselves, for instance against the whims of the markets, except the Party. If the Party changes policies, individuals risk being left on their own. This happened in Russia both in the late 1920s and in the late 1980s,

The policy of "enrich yourselves" provided the foundation on which parts of the old and new nomenclature could acquire a new basis of power - as during Perestroika. (Daastøl, 1997, p. 268)

The Reaction’s suppression of independent labour unions and Civil Society was intensified,<sup>383</sup> but now combined with radical market liberalism, leaving the population even more exposed than under the Tsarist regimes. Alan M. Ball describes the “enrich yourself” policies in his *Russia's Last Capitalists. The NEPmen, 1921-1929*.

In 1925 Bukharin was, in effect, directing his famous "enrich yourself" exhortation at the NEPmen as well as the peasantry, because his analysis had concluded that prosperity in the private sector benefited the state. (Ball, 1987, p.46)

### **c) China**

List blamed the former decay of China on despotism and moral corruption and saw a hope in the infusion of European law and government

---

<sup>383</sup> See footnote in the section above, *The bureaucratic pitfall*, for a quote on Communist views of labour unions, as instruments of the Party.

(Cf. List, 1841a, p. 419).<sup>384</sup> Individual freedom and democracy are also acute issues regarding today's China. The Listian economic model has to a large extent been adopted. The scholar on Italian Fascism and on Chinese history, James Gregor, describes in great details how Sun Yat-sen and later Taiwan, followed a policy remarkably similar to List's policy,

Like many of the reactive, developmental nationalisms we will consider, Sun's anti-imperialism bears striking resemblance to the national economic policies of Friedrich List, who outlined a policy of national growth and industrialization for nations languishing in underdevelopment. (Gregor, 2000, p. 88)

As has been suggested, Sun's proposal bore a surprising similarity to that articulated by Friedrich List almost a century earlier. As such, it was a program of developmental nationalism, distinct from the "laissez faire" policies of economic liberals and the "proletarian" policies of international socialism. ...

While the mainland of China sank deeper and deeper into the failures of Maoist economic policies, the followers of Sun Yat-sen led Taiwan to phenomenal economic development and industrial growth—while preserving equity. (Gregor, 1995, pp. 165-166)

Nevertheless, liberal policies have not been adopted, as the 'Father of the Chinese Republic' in 1911, Sun Yat-sen also advised. Like List, Sun was a pragmatic, as they both saw absolutism (List) and authoritarianism (Sun) as transitory on the road to a liberal society. This is what came to happen in Taiwan, and later South Korea.

In the chapter, *Deng Xiaoping, Sun Yat-sen, and Fascism*, Gregor claims that in mainland China Deng Xiaoping replaced Maoism with Sun's economic policy. However, Gregor claims in 2000, Deng never accepted the political liberalism of List and Sun, and therefore led China towards a system that resembles Italian Fascism, as Madame Mao and Zhou Enlai had warned about,

Buried in the contemporary discussions taking place in Dengist China are issues long neglected by Marxist theoreticians. The discussions that have followed the death of Mao have brought them, once again, to the surface.

Fascist doctrine clearly gave expression to one form of what today in Communist China is called the "theory of productive forces." Revolutionary China has long been familiar with its own variants. One variant was that of Sun Yat-sen's Three Principles of the People. With the passing of Mao Zedong, Deng Xiaoping clearly made that variant the heart of "socialism with Chinese characteristics."...

... however much the developmental reforms of Deng Xiaoping share features with those of Sun Yat-sen and Fascism, Deng's political postures have

---

<sup>384</sup> See quotation in the subsection, *Benevolent imperialism - Occidental tutelage of the Orient*, in chapter 7.

more in common with those of Mussolini's Fascism than anything else.  
(Gregor, 2000, pp. 140-144, Gregor's numerous references have been omitted)<sup>385</sup>

First, we must remember that China has not changed politically since Deng. Secondly, Gregor is a scholar on Italian Fascism who also has written many books on China with his wife, Maria Hsia Chang, a (Chinese) Professor in Chinese history.

---

<sup>385</sup> Gregor continued in more details, "Unlike Sun, Fascists specifically and consistently opposed liberal ideals and democratic institutions. In that clear sense, Fascists distinguished themselves from the followers of Sun Yat-sen. However long the preliminary periods of military rule and political tutelage might have been that Sun anticipated for revolutionary China in the 1920s, China's non-Marxist revolutionaries always insisted that military rule and political tutelage would ultimately culminate in constitutional governance- in a system substantially like that of the Western industrial democracies. For Sun and his followers, the authoritarianism of the system they would initially impose on revolutionary China was always transitional. ... It is clear that Deng has employed many of the central concepts of Sun's *Sanmin zhuyi* in his reforms, but it is just as clear that he has rejected its ultimate democratic aspirations. While there is ample talk of "democratization" in post-Maoist China, it is clear that it is the same kind of "democratization" spoken of by Fascists and Leninists.

Deng has insisted that "we cannot do without dictatorship. We must not only reaffirm the need for it, but exercise it when necessary." What ever shape the political reforms might take, the "party must lead," Deng has insisted, and the reforms "must not imitate the West, and no liberalization should be allowed." ... "Deng committed himself to absolute domestic political stability, and the unrelieved submission of the Chinese people to the political dominance of the Communist party of China and its policies."

For Deng—as it was for the first Fascists—the "soundness" of a political system is measured in terms of political stability, political unity, and unitary party rule. There is no real institutionalization of protection for individual political and civil rights—no defense of the freedom of association, expression, or choice." There is a specific rejection of any system of political or governmental "checks and balances" or multiparty alternatives that would limit the discretion of the state or its agents. Governance, for Deng, involves proceeding "under unified central leadership"—the leadership of the party. ...

In post-Maoist China, a clear effort has been made to routinize and institutionalize charismatic leadership, with the apparent intention of creating a durable vanguard party state. Together with the inculcation of patriotism, self-sacrifice, and obedience, the regime on the Chinese mainland has taken on those criterial features that have always been employed to identify fascist rule everywhere in the world. ...

That Marxist theory seems to have missed all this appears to be the consequence of Marxism's failure to understand very much about revolution in the twentieth century. ...

The charismatic and antidemocratic dispositions of Deng Xiaoping's China, combined with the entire syndrome of traits with which we are now familiar, render it an approximation of classic Fascism. ..." (Gregor, 2000, pp. 140-144, Gregor's numerous references have been omitted)

Gregor regards Fascism as a historical unity coming out of 1) Italian anti-imperialist struggle for national emancipation (i.e. a “Listian” element, demanding Industrialisation), and 2) class struggle for emancipation of Labour (i.e. left wing ‘Revolutionary Syndicalism’, with strong emphasis on economic democracy).<sup>386</sup> Therefore, keeping in mind the fate of labour unions in China, Gregor here seems to have forgotten all about Fascist roots in the labour unions. Rather, it seems as if the development in China seems to follow some of the same policies in Russia, starting with Lenin and his combination of market liberalism under Party leadership, where Deng copied Bukharin’s policy of “enrich yourself”.<sup>387</sup>

The Chinese political system froze after the 1300 person Tianmen Massacre in 1989. Reform debates stalled, and the Communist Party rules supreme.

Still, the Communist Party’s policies have changed dramatically, especially the economic policies. Nationalist- and Confucian rhetoric is increasingly replacing Communist Party Marxism, teaching adherence to the nation and authorities. Furthermore, Deng’s policies were fortified. With the new rule (1989-2002) of Deng’s successor, Jiang Zemin, China’s Communists definitely threw the proletariat over board and entered the high seas of Capitalism. Chinese Labour was to pay for China’s emergence as a great power. Not only was market economics increasingly introduced, but also Civil Society disappeared; “labour unions”, workers’ rights, and social security network - which used to be tied to the individuals life-long work place.

As in Russia, so also in China, independent Civil Society had been thoroughly demolished and organisations subjugated to Communist Party rule. Moreover, as in Russia in the 1920s and 1980s, when Party rule in China was combined with radical market liberalism in the 1990s, this left ordinary people doubly exposed.

The vacuum of Civil Society was partly filled by religious groups. Christian congregations increasingly thrive, but the *Falun Gong*<sup>388</sup> movement’s size and independence challenged the Party. In 1999, it was declared a “heretical organisation”, and massively suppressed.

Nevertheless, the Communist Party already in the mid-1990s called for massive efforts to develop science as the main production factor as well as construction of infrastructure. This course has since been followed, resulting in stupendous increases in productive power and material welfare, however unequally distributed.

It remains to be seen whether Friedrich List was right in denying that economic development can progress without civil liberties.

---

<sup>386</sup> Cf. also Sternhell, Sznaider, and Ashéri, 1994, pp. 31-32.

<sup>387</sup> For a brief discussion of this, see the end of the subsection above, *Russia*.

<sup>388</sup> Practising qigong; a revival and mixture of ancient Buddhism and Daoism, preaching moral virtue, meditation and slow physical exercise.



## 6.0 Protection and nurture

- As a strategy for development - Integration by regulated trade

### Contents

6.01 Summary	338
6.02 Power rests on productive force	340
6.03 Power rests on mentality - discipline	341
6.04 Power in international trade	343
6.05 Wars promote domestic skills and manufactures	344
6.06 English dumping and export of commercial crisis	346
6.07 Credit as a tool of power	348
6.08 Balance of trade	350
6.09 Commercial crises due to indebtedness	353
6.10 Debt lessons – American; Russian; and present	354
a) America	354
b) Russia	355
c) The British Empire - and the American	356
6.11 Dangers of monoculture – commodities especially	357
6.12 Agriculture most productive	358
6.13 The inadvisability of supporting manufactures	360
6.14 Tariffs shall primarily promote stability of home markets	363
6.15 Protection of fragile mental capital	365
6.16 Stability furthered by closeness	365
6.17 Creation of a home market & feed-back mechanisms	368
6.18 Protecting banks by securing home markets	371
6.19 Tariffs shall secondarily promote skills and liberty	372
6.20 Education tariff – the English model	373
6.21 Newcomers are disadvantaged	375
6.22 Protection furthers security, freedom, and incentives	377
6.23 Protection promotes foreign investment	378
England	379
America	379
Russia	380
China	381
6.24 Protection of sovereignty - conditions for sound protection	382
6.25 Differentiate tariffs to stage of development	383
6.26 Differentiate tariffs to national circumstances	386
6.27 Differentiate tariffs to suitable time	387
6.28 Differentiate tariffs to branch of production	388
6.29 Pragmatism - focus on potential and value added	390
6.30 Fiscal income has last priority in tariff policy	392
6.31 Differentiate tariffs - according to ranking order	393
6.32 National monopolies are tools for the public good	394
6.33 Protect against monopolisation	395
6.34 Customs unions counteract monopolies and inefficiency	396
6.35 Transportation and urbanisation promotes competition	397
6.36 Mercantilism promoted competition, efficiency- and profitability	398
6.37 Balance of payments, once again	399
6.38 Protection, once again?	404

## 6.01 Summary

List observed that a lack of industry in America was the cause of trade- and payment imbalances, indebtedness, which again led to a lack of trust in the currency, bank failures, general crisis in the economy and deterioration of industrial skills. In essence, a lack of industry, led to destabilisation and general social crisis. List argues that the Cosmopolitan School's solution of not interfering with a self-regulating international market was bound to fail, since some nations actually did follow selfish policies that undermined other nations. It would therefore be suicidal to trust the market alone, and leave oneself unprotected against the winds of global events: "The market is a deceitful mistress". List's prescribed medicine was to protect and boost industry through government intervention.

List blamed the Cosmopolitan School with conscious neglect of the dangers of trade- and payment deficits and indebtedness, resulting in - or rather in order to - establish dependency to England.

The core of List's system of productive powers is mental capital. It consists of immaterial factors such as mentality, knowledge and institutions. These take a long time, often generations to construct, but may be ruined in months. The regulatory authorities must therefore establish domestic stability and security, to protect the mental capital. One regulatory tool is using tariffs, and promoting security is the primary role of tariffs.

Disruptions of production have severe consequences for the maintenance and competitive newness of material equipment such as buildings and machinery, but the effects on mental capital is far more severe. If they are put idle, skills and knowledge soon deteriorate or even emigrate from branches, regions and even countries. Furthermore, knowledge is generally not an isolated affair, but rather a collective affair, within companies and between companies. Remove one element and then another and the network will rot and the functional organism will start to cough and lose its momentum. But not only knowledge is network based, trust is too. Trust is the origin and on-going foundation for credit. Instability therefore threatens the crucial lubrication of the economy. When the credit system breaks down the economic machine grinds to a halt, and when the economic system coughs, morality soon shows its fragility too, thereby threatening the whole social system, both materially and immaterially, with long term consequences.

A newcomer company in an established branch within an advanced economy will suffer high barriers to entry, but can benefit from many similar and happy circumstances.

Catching up with leading industrial nations is a complicated, demanding, and time-consuming task. A less developed country always will have a hard time establishing industry in branches where other countries are since long established, since it lacks know-how; regulatory experience; skilled pools of labour; cheap credit; and the advanced transport facilities,

which established companies in the advanced economy may benefit from. A newcomer in a less developed country will therefore be doubly discriminated against in the market.

List compares the situation with a boxing match between a professional boxer and a child. Furthermore, by various methods, competing established foreign companies can undercut domestic newcomers with temporary price dumping, by better quality and better credit arrangements for the customer. The barriers to entry will be far higher for a newcomer from a less developed economy, and the more knowledge intensive the industry the higher the barriers.

Given that a less developed country wants to develop its own industry, its government has no option but to level the playing field for its infant industries, in order to give them more even opportunities. This can be done by giving protection to investments, by temporarily raising tariffs. This is a weak version of the parallel of giving a temporary monopoly and protection to intellectual investment by allowing patents.

When stability of an industry is secured, investment in capital and education is potentially more profitable. Promoting incentives for investment and skills is therefore the second role of tariffs. Giving a fiscal income is the third and least important role of tariffs, but this role is improved when the revenue is used productively, such as investment in infrastructure.

Weak monopolies created by tariffs will temporarily lead to more costly products for the consumer, but List regards this as a national investment that will be paid back with increased future productivity for the nation, and with improved national culture and greater independence.

Tariffs must be used with discrimination and should therefore be temporary to prevent long-term laziness of producers, as his stage theory advises no tariffs at an early stage of development, when there are no skills to protect. As the branch matures, and skills start to develop they must be protected in a sheltered home market, and when finally the branch is competitive internationally, tariffs should be removed.

Tariffs must also be used to discriminate for those branches that 1) demand large investments in physical capital, technical knowledge, and management; 2) branches that employ many workers (when labour is abundant); 3) branches that are keys to the establishment of other industries (such as credit, transport, and machine tools), and; 4) branches that are strategically important for the survival of the nation.

Since temporarily increased import tariffs can lead to inefficiencies, List advises that this be combatted by encouraging domestic competition. But since establishing competition in a market is limited by technology (the optimal size of an establishment), the prosperity and size of a population, smaller nations must unite with other nations to create markets large enough to allow domestic competition. Along with the general advance of production technology, this issue gains importance. Competition can also be increased by improving communications, thereby decreasing the effective distance and cost of transportation.

## 6.02 Power rests on productive force

Friedrich Ratzel, widely acknowledged as the founder of geopolitics, in 1897 discusses Friedrich List in a chapter called 'The Politics of the Trade Powers' (*Die Politik der Handelsmächte*). Ratzel praises List's insight into English political principles and claims that "never has a prophet more clearly seen and drawn up the future",

In the competitive necessity of expansion, it is implied that trading countries are capable of the least constant interaction. Even Holland and England have always co-operated reluctantly. Friedrich List's representation of the principles of the English politics has to this day retained their value; never has a prophet more clearly seen and drawn up the future: ... (Ratzel, 1897, pp. 375-376: Sechzehntes Kapitel. *Der Verkehr als Raumbewältiger*; 234. *Die Politik der Handelsmächte*.)

In his article *Adam Smith, Alexander Hamilton, Friedrich List: The Economic Foundations of Military Power*, Edward Earle argues that List continued their approach relating war to productive capacity,

Smith believed that the ability of a nation to wage war is best measured in terms of its productive capacity, as was later to be argued so effectively by Friedrich List. (Earle, 1943b, p. 121)

The common link or parallel between Friedrich List and Halford Mackinder<sup>389</sup>, which would normally be pointed to, would be the importance of geography, i.e. natural and given circumstances like resources, manpower and position. However, it is easy to see something more profound; Mackinder writes,

---

<sup>389</sup> The Fabian Socialist Halford J. Mackinder, a British Privy Council member etc, was the father of modern British geopolitics, and a leading British strategist from before the turn of the Twentieth Century until the end of the Second World War. Mackinder advanced the political bipolarity of the "Land powers" (the Heartland) versus the "Sea powers" (essentially the COM-ECON dominated by the USSR, versus NATO dominated by the USA, in the post WW II period): He is "noted for his work as an educator and for his geopolitical conception of the globe as divided into two camps, the ascendant Eurasian "heartland" and the subordinate "maritime lands," including the other continents. Encyclopedia Britannica writes of him;

"Holding strong imperialist views, he included in his circle of friends similarly minded men, among them the politician L.S. Amery and Lord Milner, the imperial administrator." (Encyclopaedia Britannica, 2008)

Leo Amery was a great admirer of List (Cf. Amery, 1906), and also e.g. First Lord of the Admiralty and one of the two main Round Table Group backers of W. Churchill when N. Chamberlain was replaced in May 1940, after the Norway debacle.

Productive power, in short, is a far more important element of reality in relation to modern civilization than is accumulated wealth. (Mackinder, 1919, p. 4)

In addition, as Edward Earle argues, this view they shared with Adam Smith and Alexander Hamilton. Earle summarises List's economic point relating to war such,

The greater the productive power, the greater the strength of the nation in its foreign relations and the greater its independence in time of war. Economic principles, therefore, cannot be divorced from their political implications: ... (Earle, 1943b, p. 142)

### **6.03 Power rests on mentality - discipline**

Friedrich Ratzel likewise argues that List focused on ability (to create) rather than wealth itself, and likewise Ratzel also had a special eye for immaterial factors, that e.g. Mackinder was to continue,

It is characteristic that Friedrich List created his opinion, that the power to create wealth is more valuable for a nation than the wealth itself, with a growing people, namely in the United States of America. He aspired to transfer the strength of the national idea, which he learnt to know with this young people, to his old people. (Ratzel, 1897, p. 263n, Fifth Part, chapter 12: The Political Space, p. 176: The School of Space)

The parallel that is the far more important as it is forgotten is the role of mental factors, immaterial or moral if you like. Poor natural circumstances have on several occasions been a spur for development, such as in the Netherlands, Prussia and Japan. In addition, List always, from his early papers to this last, pointed to the role of morality, mental capacities, discipline and willpower. Mackinder argues just as List had done earlier on,<sup>390</sup>

... in 1905 I wrote in the *National Review* on the subject of "Manpower as a Measure of a National and Imperial Strength," an article which I believe first gave vogue to the term Man-Power. In that term is implicit not only the idea of fighting strength but also that of productivity, rather than wealth, as the outcome of economic reasoning. If I now venture to write on these themes at somewhat greater length, it is because I feel that the war has established, and not shaken, my former points of view. (Mackinder, 1919, pp. 99-100)

---

<sup>390</sup> List writes, "The object is not to *gain matter, in exchanging matter for matter*, .... But it is to gain productive and *political power*..." (List, 1827b, Letter IV, p. 57)

Mackinder not only followed List's emphasis on natural conditions and transportation, but like List also placed a huge emphasis on cultural and immaterial factors,

Man-power—the power of men—is also in these modern days very greatly dependent on organization, or, in other words, on the Going Concern, the social organism. (Mackinder, 1962 (1919), pp. 99-100)

Regarding Russia before the 1917 Revolution, Mackinder wrote that the only remedy against a breakdown of productive habits and – discipline is realism and forced organisation,

In times of disorder the interlocking of productive habits breaks down step by step, and society as a whole becomes progressively poor, though robbers of some kind or another may for a while enrich themselves. Even more serious, however, is the failure of the habit of discipline, for that implies the loss of the power of recuperation. ... History shows no remedy but force upon which to found a fresh nucleus of discipline in such circumstances; but the organiser who rests upon force tends inevitably to treat the recovery of mere efficiency as his end. Idealism does not flourish under his rule. ... The great organiser is the great realist.' (Mackinder, 1962 (1919), p. 13)

Nevertheless, even Adam Smith harboured similar ideas of the pre-eminence of the (martial) spirit over matter, and this broke with the rather materialist tendency of his writings. Edward Earle writes that Smith, while perhaps inspired by Francis Bacon, argued that this would "deserve the most serious attention of government",

More than three hundred years ago, Francis Bacon pointed out that the ability of a nation to defend itself depended less upon its material possessions than upon the spirit of the people, less upon its stocks of gold than upon the iron of determination in the body politic.<sup>20 391</sup> As a professor of moral philosophy, Adam Smith must have been acquainted with the works of Bacon. In any case, he believed that "The security of every society must always depend, more or less, upon the martial spirit of the great body of the people ..." And Smith went even further in the belief that "even though the martial spirit of the people were of no use towards the defense of the society, yet to prevent that sort of mental mutilation, deformity, and wretchedness, which cowardice necessarily involves in it, from spreading themselves

---

<sup>391</sup> 20) Francis Bacon, "Of the True Greatness of Kingdoms and Estates," no. 19 of *Essays Civil and Moral*, in *The Works of Francis Bacon*, ed. James Spedding (Boston, 1840), 7:176 ff. (Earle's note) Bacon's words are: "Walled towns, stored arsenals and armories, goodly races of horse, chariots of war, elephants, ordnance, artillery, and the like; all this is but a sheep in a lion's skin, except the breed and disposition of the people be stout and warlike. Nay, number (itself) in armies importeth not much, where the people is of weak courage; for (as Virgil saith) It never troubles a wolf how many the sheep be."

through the great body of the people, would still deserve the most serious attention of government;...” (Earle, 1943b, p. 330)<sup>53 392</sup>

## 6.04 Power in international trade

Whereas List’s position regarding international power is firmly within the Realist camp, List regarded Adam Smith as not only an “Idealist” but even as a dangerous Utopian; unable to acknowledge the international realities and thus leading common understanding astray,

... Although here and there he speaks of wars, this only occurs incidentally. The idea of a perpetual state of peace forms the foundation of all his arguments. (List, 1841, ch. 11, p. 120)<sup>393</sup>

To Friedrich List, the factual setting for a science of political economy is an international economic system of competing nations, where trade and war were both part of a Mercantilist gamble for power. Since this is so often misunderstood, it must be noted that List saw this as the real and factual arrangement, and not at all as the ideal and desired arrangement - in other words it was a description, and not intended as normative. His desired arrangement was a balanced industrial development of all nations, and legal agreements gradually leading to “true” free trade – making colonies and navies redundant.<sup>394</sup>

List claims that international trade is shaped mainly by the respective power of the nations involved, and therefore is shaped “in an entirely different manner” than domestic trade, which is done under the same “roof” and rule,

The imports and exports of independent nations are regulated and controlled at present not by what the popular theory calls the natural course of things, but mostly by the commercial policy and the power of the nation, by the influence of these on the conditions of the world and on foreign countries and peoples, by colonial possessions and internal credit establishments, or by war and peace. Here, accordingly, all conditions shape themselves in an entirely different manner than between societies which are united by political, legal, and administrative bonds in a state of unbroken peace and of perfect unity of interests. (List, 1841a, p. 272)

Different nations have different abilities to flex their power and they follow different national policies. These different policies decide how a trade imbalance will be sorted out, whether towards re-balance and temporary “equilibrium”, or towards greater imbalances.

---

<sup>392</sup> 53) Smith, *Wealth of Nations*, bk. 5, ch. I, pp. 738-40. (Earle’s note)

<sup>393</sup> A more extensive quotation may be seen in the section; *A universal confederation of nations*, in chapter 7.

<sup>394</sup> Cf. e.g. the discussion in the section, *From protection to free trade*, in chapter 7.

List argues that foreign trade must be considered not myopically from a short-term “monetary” point of view, but rather from a long-term national point of view regarding survival, power, and prosperity,

The foreign trade of a nation must not be estimated in the way in which individual merchants judge it, solely and only according to the theory of values (i.e. by regarding merely the gain at any particular moment of some material advantage); the nation is bound to keep steadily in view all these conditions on which its present and future existence, prosperity, and power depend. (List, 1841a, p. 144)

### **6.05 Wars promote domestic skills and manufactures**

List uses the socio-economic effects of wars as an illustration for what a highly protective system may accomplish in times of peace; and furthermore that peace - if not accompanied by protective policies - will ruin a less developed nation.

Although List was in favour of politically based and limited economic protection and strongly against social interruptions, especially wars, List pointed out that wars also had productive results. Wars act as a protective system, under which national industries may grow.

War exercises a great influence on the selection of the precise system of protection, inasmuch as it effects a compulsory prohibitive system. (List, 1841a, ch. 26, p. 309)

List also claims that promoters of the Cosmopolitical School do not understand how a protective system continues the productive effects that wars have on a national industry,

It does not take into account the influence of war on the necessity for a protective system; especially it does not perceive that war effects a compulsory prohibitive system, and that the prohibitive system of the custom-house is but a necessary continuation of that prohibitive system which war has brought about. (List, 1841a, p. 316)

List argues that wars and not academic theories is the mother of the economic policy of protection. A protective system is normally introduced as the result of real life (i.e. war), and not as a result of theories,

In practice ... the introduction of a protective system is generally the result of a war and has nothing to do with theories advanced by economists. (List, 1837a, p. 110)

It is war that has called into existence the more recent systems of protection; and we do not hesitate to assert, that it would have been to the interest of the manufacturing nations of the second and third rank to retain a protective policy and further develop it, ... (List, 1841a, ch. 15, p. 183)



During wars, List claims, domestic industries are forced to develop in the agricultural nation; and self-reliance and vested interests for industry develop accordingly and they continue to be forceful after the war is over.

War has a ruinous effect on the reciprocal commercial relations between nation and nation. ... manufactures and factories will spring up in it in consequence of the interruption of international commerce by war. War acts on it like a prohibitive tariff system. It thereby becomes acquainted with the great advantages of a manufacturing power of its own, it becomes convinced by practical experience that it has gained more than it has lost by the commercial interruptions which war has occasioned. The conviction gains ground in it, that it is called to pass from the condition of a mere agricultural State to the condition of an agricultural-manufacturing State, and in consequence of this transition, to attain to the highest degree of prosperity, Civilisation, and power. But if after such a nation has already made considerable progress in the manufacturing career which was opened to it by war, peace is again established, and should both nations then contemplate the resumption of their previously existing commercial intercourse, they will both find that during the war new interests have been formed, which would be destroyed by re-establishing the former commercial interchange.<sup>395</sup> The former agricultural nation will feel, that in order to resume the sale of its agricultural products to the foreigner, it would have to sacrifice its own manufacturing industry which has in the meanwhile been created; the manufacturing nation will feel that a portion of its home agricultural production, which has been formed during the war, would again be destroyed by free importation. Both, therefore, try to protect these interests by means of imposing duties on imports. This is the history of commercial politics during the last fifty years. (List, 1841a, ch. 15, pp. 182-183)

List's description of the effects of the end of a war, and thereby the end of protection, to some extent also describes the situation in Eastern Europe after the end of the Cold War, when East European industry suddenly became exposed - and lost to more efficient industry in Western Europe,

In time of war every country is forced to establish factories to make those goods which were formerly imported from abroad in exchange for products made at home. The result is the same as that achieved by a prohibitive fiscal policy in peace time. The nation is forced to demand great sacrifices from consumers in order to create new industries. And this happens just when the means available for the establishment of manufactures have been reduced to a minimum. If free trade is introduced when hostilities cease the newly established industries will be thrown to the tender mercies of foreign competitors. In these circumstances a country will lose all the capital, all the experience, and all the work of the war years and will return to its former position of weakness and dependence upon foreigners. (List 1837a, p. 32; cf. also List, 1827b, p. 131)

---

<sup>395</sup> 1. Vide *Wealth of Nations*, Book IV. chap. ii. (TR.) (Translator's note, 1904 edition, 'vide' means to see)

While a war may be a blessing for the productive forces of a nation, a peace that brings a return to free import would destroy what has been built, and therefore peace becomes a curse incomparably worse than war for the nation,

A war which leads to the change of the purely agricultural State into an agricultural-manufacturing State is therefore a blessing to a nation, just as the War of Independence of the United States of North America, in spite of the enormous sacrifices which it required, has become a blessing to all future generations.

But a peace which throws back into a purely agricultural condition a nation which is fitted to develop a manufacturing power of its own, becomes a curse to it, and is incomparably more injurious to it than a war. (List, 1841a, ch. 15, p. 183)

This was apparently written during a period when wars were relatively speaking civilized; and before 'total war' - also against the civilian population - became commonplace, such as in the Anglo-Boer War (Cf. e.g. de Kock, 1981; and Pakenham, 1979). Nevertheless, even in the cases of Japan and Germany, utterly devastated by WW II, they managed to restore themselves materially astonishingly fast afterwards (even though Germany was thoroughly 'brain-drained' by the victorious Allies). This has also been the case with South-Korea. This points e.g. to the role of popular discipline, as the British strategist Halford Mackinder attracted attention to (Cf. Mackinder, 1919, p. 13).

England made the mistake of imposing restrictions on the import of less advanced goods, depriving her competitors of the means to buy England's products; and thereby indirectly but effectively promoting their domestic manufacture of advanced products, by themselves.

England after the conclusion of peace had not committed the monstrous mistake of imposing restrictions on the importation of necessities of life and of raw materials, and consequently of allowing the motives which had led to the system of protection in the time of the war, to continue during peace. (List, 1841a, ch. 15, p. 183)

## **6.06 English dumping and export of commercial crisis**

What List writes about English practices reminds us of the currency wars being fought out at the start of the 21<sup>st</sup> century: List writes that the English price their goods inexorably low abroad, for instance after gluts in the home market, through economics of scale, and aided through the operations of the English national bank,

... the English national bank is able by its operations to depress the prices of English manufactured goods in the American markets .... (Cf. List, 1841a, pp. 280-281)

List argues that such dumping is a kind of clever export subsidy, since this gift to other countries is later cashed in by the English in the shape of less competition, since other countries' industry thereby go bankrupt and fail to develop their own industry, often resulting in English monopoly with exorbitant prices - and immense gain of English power,

Since the time when the Trojans were 'presented' by the Greeks with a wooden horse, the acceptance of 'presents' from other nations has become for the nation which receives them a very questionable transaction. The English have given the Continent presents of immense value in the form of subsidies, but the Continental nations have paid for them dearly by the loss of power. These subsidies acted like a bounty on exportation in favour of the English, and were detrimental to the German manufactories. (List, 1841a, p. 146)

If the English very often find occasion to offer presents to foreign nations, very different are the forms in which this is done; it is not unfrequently done against their will; always does it behove foreign nations well to consider whether or not the present should be accepted. (List, 1841a, p. 147)

List writes that the English, as de facto monopolists, use any domestic commercial crisis, overproduction or 'gluts', to dump their goods abroad. After a crisis, their competitors abroad have gone bankrupt and the English gain from better prices both at home and abroad,

Through their position as the manufacturing and commercial monopolists of the world, their manufactories from time to time fall into the state which they call 'glut,' and which arises from what they call 'overtrading.' At such periods everybody throws his stock of goods into the steamers. After the elapse of eight days the goods are offered for sale in Hamburg, Berlin, or Frankfort, and after three weeks in New York, at fifty per cent under their real value. The English manufacturers suffer for the moment, but they are saved, and they compensate themselves later on by better prices. The German and American manufacturers receive the blows which were deserved by the English -- they are ruined. (List, 1841a, pp. 146-147)

List continues by explaining how these crises hardly hurt the English but shake less developed countries to their foundations. He claims that the Cosmopolitan School does not bother to discuss the reasons and effects of such crises - let alone remedies and preventive measures. List asks, "ought we not then to become very sceptical" of the correctness of letting the less developed nations be ruled by this "theory of values and according to cosmopolitical principles?"

The English nation merely sees the fire and hears the report of the explosion; the fragments fall down in other countries, and if their inhabitants complain of bloody heads, the intermediate merchants and dealers say, 'The crisis has done it all!' If we consider how often by such crises the whole manufacturing power, the system of credit, nay the agriculture, and generally the whole economical system of the nations who are placed in free

competition with England, are shaken to their foundations, and that these nations have afterwards notwithstanding richly to recompense the English manufacturers by higher prices, ought we not then to become very sceptical as to the propriety, of the commercial conditions of nations being regulated according to the mere theory of values and according to cosmopolitical principles? The prevailing economical school has never deemed it expedient to elucidate the causes and effects of such commercial crises. (List, 1841a, pp. 146-147)

List refers to an American Congressman, who states that by following modern (Cosmopolitan) principles, our manufactures; our merchants; and even our landowners were ruined,

An orator in Congress said afterwards of this crisis: 'We did buy, according to the advice of modern theorists, where we could buy cheapest, and our markets were flooded with foreign goods; English goods sold cheaper in our seaport towns than in Liverpool or London. Our manufacturers were being ruined; our merchants, even those who thought to enrich themselves by importation, became bankrupt; and all these causes together were so detrimental to agriculture, that landed property became very generally worthless, and consequently bankruptcy became general even among our landowners.' (List, 1841a, p. 95)

## **6.07 Credit as a tool of power**

List was extremely aware of the role of the national and the international financial markets and the danger that free trade in the financial markets represented for the stability, sovereignty, and well-being of the nation.

He was well aware that credit (and debit) historically was a power-tool stronger than any army. In chapter 23, *Manufacturing Power and the Instrument of Circulation*, he discussed this at length. For instance, List comment the imbalanced Anglo-American trading situation by saying that prolonged credit to America would be even more harmful,

As a creditor can keep the debtor on his legs for a long time by renewals of credit, but the bankruptcy of the debtor must become so much the greater the longer he is enabled to prolong a course of ruinous trading by means of continually augmented credit from the creditor, so was it also in this case. (List, 1841a, p.278)

The Siamese twins of credit and debt have historically been an important tool in state building, warfare and in the international power-game (Wallerstein, 1978, p.44; Marx, 1867, Book I, chapter 31: *Genesis of the Industrial Capitalist Capital*; Braudel, 1985, p.241; Kennedy, 1989, p.89). Similarly, Richard Werner argues that finance has played a decisive role in the rise and fall of nations,

Wars were often funded by banks, whether it was William of Orange's invasion of Britain or Napoleon's international campaigns. Indeed, a cursory survey of the history of banking appears to coincide with the history of the rise (and fall) of advanced economies and empires. There are few advanced civilizations that did not use credit systems. Sparta appears to have been one such exception, which perhaps contributed to the rivalry perceived by banking-dominated Athens. (Werner, 2005, p.164)

As Niall Ferguson explains, in his *The Ascent of Money. A Financial History of the World*; the bond market is the mother of national and international power,

Credit and debt, in short, are among the essential building blocks of economic development, as vital to creating the wealth of nations as mining, manufacturing or mobile telephony. ...

The evolution of banking was thus the essential first step in the ascent of money. The financial crisis that began in August 2007 ... was only possible because the rise of banks was followed by the ascent of the second great pillar of the modern financial system: the bond market. ...

In the words of Bill Gross, who runs the world's largest bond fund at the Pacific Investment Management Company (PIMCO), 'bond markets have power because they're the fundamental base for all markets. The cost of credit, the interest rate [on a benchmark bond], ultimately determines the value of stocks, homes, all asset classes.' (Ferguson, 2008, pp. 63; 64; and 68)

Matthew Smith Anderson, in his classic *Europe in the Eighteenth Century*, explains that Britain's advantage over France already at an early stage was precisely her access to cheap credit,

In the 1730s the philosopher George Berkeley described it as 'the chief advantage England has over France; and three decades later an expert on commercial questions spoke of the strength of England's public credit as 'the permanent miracle of her policy, which has inspired both astonishment and fear in the States of Europe'. ... These comments had much justification: of the costs of the four great wars fought by Britain in 1702-83 three-quarters were raised by borrowing. It was borrowing moreover at relatively low rates of interest: the ability to raise money cheaply was a major British advantage in the country's struggle with France. (Anderson, 1987, p.108)

In her article, *The Fall of Great Britain ...*, Zara Steiner notices notes the crucial role of finance for London in the 20<sup>th</sup> Century,

It is the present view of some historians that it was Britain's financial and commercial role and not its manufacturing base that was, and remained, the real source of her wealth. The City of London played the dynamic role in overseas expansion and stood at the centre of Britain's global prestige. World trade was invoiced in pounds and financed by London. (Steiner, 1994, p.48)

In his classic and mammoth work on the first half of the 20<sup>th</sup> Century, *Tragedy and Hope*, The Washington historian Carroll Quigley, teacher of US President Bill Clinton, explains this change towards financial capitalism as of “overwhelming significance”, and as a result of capital accumulation coupled with oligarchic and clandestine skill in London,

Credit had been known to the Italians and the Netherlanders long before it became one of the instruments of English world supremacy. ... This new stage of financial capitalism, which continued to dominate England, France, and the United States as late as 1930, was made necessary by the great mobilisations of capital needed for railroad building after 1830. ... The third stage of capitalism is of such overwhelming significance in the history of twentieth century, and its ramifications and influences have been so subterranean and even occult, ... This system had its centre in London for four chief reasons. ... great volume of savings ... oligarchical social structure ... aristocratic but not noble ... skill in financial manipulation, especially on the international scene. (Quigley, 1966, pp. 48-50)

As List was aware of the power of credit, he claimed that open international capital markets and exchange markets were a security threat to sovereign nations, especially small and underdeveloped nations. Such unregulated markets were more or less an invitation to destabilisation, e.g. through dumping; and then for nations to be bought off cheaply; as well as an invitation to foreign dictates over domestic economic policy. He was well aware of the destructive effects from rapid fluctuations in the financial markets, for consumption as well as for production. For all of these reasons, he accordingly called for protection of production and regulation of these markets, in order to achieve balance of trade and economic and social stability,

... as long as separate national interests exist, a wise State policy will advise every great nation to guard itself by its commercial system against extraordinary money fluctuations and revolutions in prices which overturn its whole internal economy, and it will attain this purpose only by placing its internal manufacturing production in a position of proper equality with its internal agricultural production and its imports with its exports. (List, 1841a, ch. 23, p. 282)

## **6.08 Balance of trade**

List was worried about unbalanced trade. In 1841, List explained in details the American industrial and financial dependence on Britain and the crucial role of the balance of trade in creating destructive dependency (Cf. List, 1841a, ch. 23 *Manufacturing Power and the Instruments of Circulation*), thereby anticipating modern dependence theory by a Century and a half.

Adam Smith's claim that "almost all the other regulations of commerce are founded" upon the "doctrine of the balance of trade",<sup>396</sup> is remarkable - and just as remarkable it is, that this claim is little noticed today - a very lonely exception can be found in *Free Trade Under Fire* by Douglas Irwin (Irwin, 2002, p.145).

List criticises the orthodox school for their claim that the balance of trade issue was a ridiculous fault in the theories of the Mercantilists. List argues to the contrary that an independent nation cannot continue for a longer time to maintain a trade deficit, increase its indebtedness and at the same time progress in prosperity,

However much the doctrine of the balance of trade may have been scorned by the popular school, observations like those above described encourage us nevertheless to express the opinion that between large and independent nations something of the nature of a balance of trade must exist; that it is dangerous for great nations to remain for a long period at very considerable disadvantage in respect of this balance, ...

What we deny is merely this: that a great and independent nation, as Adam Smith maintains at the conclusion of his chapter devoted to this subject, 'may continually import every year considerably larger values in products and fabrics than it exports; that the quantities of precious metals existing in such a nation may decrease considerably from year to year and be replaced by paper circulation in the interior; moreover, that such a nation may allow its indebtedness towards another nation continually to increase and expand, and at the same time nevertheless make progress from year to year in prosperity.'<sup>397</sup>

This opinion, expressed by Adam Smith and maintained since that time by his school, is alone that which we here characterise as one that has been contradicted a hundred times by experience, as one that is contrary in the very nature of things to common sense, in one word (to retort upon Adam Smith his own energetic expression) as 'an absurdity.' (List, 1841a, p. 286)

Checking Adam Smith's original text proves List right; Smith writes,

IN the foregoing part of this chapter I have endeavoured to show, even upon the principles of the commercial system, how unnecessary it is to lay extraordinary restraints upon the importation of goods from those countries with which the balance of trade is supposed to be disadvantageous.

Nothing, however, can be more absurd than this whole doctrine of the balance of trade, upon which, not only these restraints, but almost all the other regulations of commerce are founded. When two places trade with one another, this doctrine supposes that, if the balance be even, neither of them either loses or gains; but if it leans in any degree to one side, that one of them loses and the other gains in proportion to its declension from the exact equilibrium. (Smith, 1776, book IV, ch. iii, part ii)

---

<sup>396</sup> Cf. Smith, 1776, book IV, ch. iii, part ii, Cf. a more extensive quotation below.

<sup>397</sup> 2: Smith 1776, book IV, ch. iii [List's note]

By inference, England's trade partners may therefore without worries put themselves in debt to England. Trade will always be in equilibrium, eventually.

List claims that the popular school think that trade imbalances will solve themselves, since the new level of precious metals (aka devaluation) will lead to lower export prices. This will increase competitive ability; boost exports; and soon trade and payments will again balance: In other words, imbalances are temporary and a just a matter of natural oscillations (Cf. List, 1841a, p. 271). List agrees that this is correct concerning domestic trade between states within one customs union, like the Zollverein, United States and Great Britain, but the matter is different concerning international trade between customs unions and nations (Cf. List, 1841a, p. 272).

Furthermore, when List criticises the orthodox school for its very conscious neglect of the balance of trade issue, he claims that the popular school has tried to hide the disadvantages of trade deficits (by cunningly using a 'shop-keeper' like calculation) (in order to create dependency,

The popular school has made clever use of all those delusions arising from a shopkeeper-like calculation and comparison of the value of the exchanges arising from the exports and imports, in order to make us disbelieve in the disadvantages which result from a real and enormous disproportion between the exports and imports of any great and independent nation, ... (List, 1841a, p. 287)

Furthermore, List argues that the balance of trade issue is a matter of national independence, of sovereignty, and if this problem is not resolved successfully, the deficit countries might as well do better as colonies of the creditor country,

In general it appears to us that the defenders of free trade would argue more consistently in regard to money crises and the balance of trade, as well as to manufacturing industry, if they openly advised all nations to prefer to subject themselves to the English as dependencies of England, and to demand in exchange the benefits of becoming English colonies, which condition of dependence would be, in economical respects, clearly more favourable to them than the condition of half independence in which those nations live who, without maintaining an independent system of industry, commerce, and credit of their own, nevertheless always want to assume towards England the attitude of independence. (List, 1841a, p. 290, cf. also pp. 285-293)<sup>398</sup>

List argues that the alternative to industrialisation (through a protective policy and thereby balance or even surplus in trade), would be that of becoming a colony of the dominant nation, as the USA had been un-

---

<sup>398</sup> The following part of this quotation may be found in chapter 6 in the section, '*Independent vassalage*' and *tropical colonies*.



der England during Adam Smith's lifetime (Cf. e.g. List, 1841a, p. 289-91).

List's remedy against "money fluctuations and revolutions in prices", gluts, overproduction and financial and commercial crises, is regulation of taxes, tariffs and finance in general in order to secure a sound balance of trade and of payments.

## **6.09 Commercial crises due to indebtedness**

List blames these damaging commercial crises on financial indebtedness, that were due, he claimed, to the imbalance in payments resulting from poor exports in relation to imports. An independent but non-industrialised nation, List argues, will become indebted and then torn apart again and again by financial and commercial crises. This nation's independence will therefore be illusory, as would its welfare. List claims that agricultural nations suffer more often from disrupting crises.

List claims that the American commercial crises were due to her debt to England, which was caused by trade deficits and ultimately by the lack of American protection and accordingly productive power.

The cause of the latest as well as of former American commercial crises, has been alleged to exist in the American banking and paper system. The truth is that the banks have helped to bring about these crises in the manner above named, but the main cause of their occurrence is that since the introduction of the 'compromise' bill the value of the English manufactured goods has far surpassed the value of the exported American products, and that thereby the United States have become indebted to the English to the amount of several hundreds of millions for which they could not pay in products. The proof that these crises are occasioned by disproportionate importation is, that they have always taken place whenever (in consequence of peace having set in or of a reduction being made in the American customs duties) importation of manufactured goods into the United States has been unusually large, and that they have never occurred as long as the imports of goods have been prevented by customs duties on imports from exceeding the value of the exports of produce. (List, 1841a, ch. 23, p. 277)

List claimed that America's loans merely delayed and increased the crises,

The blame for these crises has further been laid on the large capital which has been expended in the United States in the construction of canals and railways, and which has mostly been procured from England by means of loans. The truth is that these loans have merely assisted in delaying the crises for several years, and increasing it when it arose; but these very loans themselves have evidently been incurred through the inequality which had arisen between the imports and exports, and but for that inequality would not have been made and could not have been made. (List, 1841a, ch. 23, p. 277)

List furthermore claimed that the indebtedness and crises allowed English interests to procure American state paper and -stocks in rail-ways, canals and banks,

While North America became indebted to the English for large sums through the large importation of manufactured goods which could not be paid for in produce, but only in the precious metals, the English were enabled, and in consequence of the unequal rates of exchange and interest found it to their advantage, to have this balance paid for in American rail-way, canal and bank stocks, or in American State paper. (List, 1841a, ch. 23, p. 277)

A somewhat similar situation can be found in the indebted countries in the Eurozone: After the US-reared financial crisis hit Europe in late 2008, governments sold off and privatised infrastructure to pay public debt, after bailing out reckless private banks.

List insisted that the only way to avoid indebtedness and loss of sovereignty and welfare was to build industry, through different stages of development and policies. This was also his solution for a country that already was in debt, the USA. To get out of debt the USA had to improve its balance of trade by expanding its exports. The only way to do this was improve the US productivity by increasing the nation's productive powers.

## **6.10 Debt lessons – American; Russian; and present**

### **a) America**

List goes into greater detail on the necessity of balancing imports with exports, by protecting the home market from foreign imports, thereby placing them on “on a footing of equality to the exports”, and more specifically so by protecting against foreign manufactures and by easing export of agricultural produce.

This failure to do so led to a US trade deficit and indebtedness,

The commercial conditions between England and North America which we have above explained, therefore teach:

(1) That a nation which is far behind the English in capital and manufacturing power cannot permit the English to obtain a predominating competition on its manufacturing market without becoming permanently indebted to them; without being rendered dependent on their money institutions, and drawn into the whirlpool of their agricultural, industrial, and commercial crises.... (List, 1841a, pp. 280-281)

List argues that a free market allows dumping of English manufactured products in the USA, aided by operations of the English national

bank.

(2) That the English national bank is able by its operations to depress the prices of English manufactured goods in the American markets ....

According to List, US debt was then covered by US sale of equities to England, leading to a semi-colonial status where US matters are decided abroad, reminiscent of recent developments e.g. in southern Europe,

(3) That the English national bank could effect by its operations the consumption by the North Americans, for a series of years, of a much larger value of imported goods than they would be able to repay by their exportation of products, and that the Americans had to cover their deficit during several years by the exportation of stocks and State paper.

Finally, List argues that these disadvantageous fluctuations, in the money market and in the banking system, can only be avoided if a balance of trade is restored, meaning that the nation in question has to improve its productive powers and industrialise,

(4) That under such circumstances the Americans carried on their internal interchange and their bank and paper-money system with ready money, which the English bank was able to draw to itself for the most part by its own operations whenever it felt inclined so to do.

(5) That the fluctuations in the money market under all circumstances act on the economy of the nations in a highly disadvantageous manner, especially in countries where an extensive bank and paper-money system is based on the possession of certain quantities of the precious metals.

(6) That the fluctuations in the money market and the crises which result therefrom can only be prevented, and that a solid banking system can only be founded and maintained, if the imports of the country are placed on a footing of equality to the exports.

(7) That this equality can less easily be maintained in proportion as foreign manufactured goods can successfully compete in the home manufacturing markets, and in proportion as the exportation of native agricultural products is limited by foreign commercial restrictions; finally, that this equality can less easily be disturbed in proportion as the nation is independent of foreign nations for its supply of manufactured goods, and for the disposal of its own produce. (List, 1841a, p. 281)

## **b) Russia**

List then points to similar experiences in Russia, where free trade also was accompanied by crisis - and vice versa; as the introduction of a tariff in 1821 ended the convulsions,

These doctrines are also confirmed by the experience of Russia. We may remember to what convulsions public credit in the Russian Empire was subjected as long as the market there was open to the overwhelming consignments of English manufactured goods, and that since the introduction of the tariff of 1821 no similar convulsion has occurred in Russia. (List, 1841a, p. 281)

Russia at the turn of the 20<sup>th</sup> Century suffered, like the USA before her, from a negative balance of trade and many ills resulting therefrom. Theodore von Laue explains how PM Sergei Witte,<sup>399</sup> used List's solution for American problems, being indebted to Britain, to plan a remedy for Russia (whose exports were "mono-cultural") being indebted to Germany and France; Russia suffered from falling grain prices, but more industry would restore Russia's balance of trade and solve all economic problems. Laue writes,

But there was even more for Witte in List's book, for it dealt also with the special problems arising out of the economic relations between a predominantly agricultural country and a highly industrialized one. During his residence in Pennsylvania, List had gained some insight into the penalties of economic inferiority. The prosperity of the United States, he and his American fellow protectionists had felt, was at the mercy of the British. From Witte's perspective, List's account of his American experience applied to Russia as well, a Russia heavily indebted to Germany and France, depending for her well-being on her exports of grain to a highly competitive market with disastrously falling prices, and her credit triply undermined by her debts, her uncertain exports, and her paper money. List's categorical remedy for all these problems was more national industry. Industry would restore the balance of trade, which he, in contrast to the free traders, again justified as a government concern. It would reduce the country's dependence on foreign markets and on foreign producers, strengthen her agriculture, stabilize the currency, and civilize the country as a whole. Industrialization, in short, was the panacea for all the economic ills of Russia with which the ministers of finance had so vainly tried to cope. (Laue, 1963, p. 59)

### **c) The British Empire - and the American**

These lessons, of lacking industry and resulting indebtedness and loss of sovereignty, are being played out in the West today, but this time in the "chronological reverse". List's stage theory of development is so to speak being played out in reverse. This follows four decades of relative deindustrialisation in most Western countries. Dean Kishore Mahbubani in Singapore, is quoted in an article in *China Daily*; 'Move over West, Asia is here'. He says that the West debt crisis is Western because it has forgotten how it became wealthy and has to relearn this from Asia,

---

<sup>399</sup> Sergei Witte was a Baltic-Russian patriot, Railroad Minister, then Finance Minister and finally Prime Minister, who administered the construction of the Trans-Siberian railroad under Tsar Alexander III and Tsar Nicolay II.

The world is entering a new era, an era marked by two major changes. The first is the beginning of the end of Western domination - not the end of the West, though. The second is the Asian "renaissance", because the 21st century will be the century of Chinese and Indian economies. These are the words of Kishore Mahbubani, dean of Lee Kuan Yew School of Public Policy at the National University of Singapore. ...

"This is a Western financial crisis," he says, "because the problems are the results of Western leaders' failure to understand that they faced a new competition." Western minds couldn't think that other societies were becoming more successful than them. People in the US and the EU live beyond their means. Does "Western wisdom" say keep borrowing despite mounting budget deficits? The West has to "relearn" Western wisdom from the East, Mahbubani says.

"Asian societies are doing well (today) because they understood and absorbed the main pillars of Western wisdom, including the market, science, education and rule of law. But Western societies are gradually walking away from these pillars." (*Li Yang*, 2010, p. 9)

American history is thus repeating much of the same "cause and effect" that was played out one hundred years earlier – in Great Britain. In addition, with the decrease of American manufacturing capability, larger deficits and debt, a renewed interest has arrived for alternative policies for the USA.<sup>400</sup> This too is a repetition of former phenomena: Around the turn of the twentieth Century, the most influential strategist circles in Britain, with e.g. Chamberlain, Milner, Amery, Mackinder and Salisbury all saw that e.g. List could explain why Britain was falling behind, and that he gave them a remedy to solve the problem.<sup>401</sup> That they did not pay heed to his advice for a harmony of interests, however, surely cannot be blamed on List.

### **6.11 Dangers of monoculture – commodities especially**

List warns against the destabilising effects from a lack of industry, since export of raw materials is more liable to fluctuations. To this, he added the danger and vulnerability of having a one-sided economy, in particular when the lack of an industrial sector led to increased dependence upon foreign consumption, for its own economic stability. A monocultural primitive economy was more prone to indebtedness and commercial crisis than a mature and heterogeneous economy,

It is dangerous to allow the prosperity of a country's arable land to be entirely dependent upon the export of cereals and raw materials in exchange

---

<sup>400</sup> This is discussed further in the *Introduction*; *Recent interest in List*; and in the sections below; *Balance of payments, once again*, and *Protection, once again*.

<sup>401</sup> This is briefly discussed in the section *British strategists substantiate List's claims*, in chapter 7.

for manufactured products. Such agricultural exports are liable to serious fluctuations. (List, 1837a, p. 56)

Perilous monoculture is not only a problem for 'backward' agricultural nations, but also is a problem with developed nations like Australia and Norway - who both are highly dependent on high demand for their commodities in foreign industrialised nations. The demand of their export products, affect everything from the costs of domestic Labour and real estate - to the value of their currency and other export products.

The opposite of a monocultural development is a balanced development in the tradition of e.g. Alexander Hamilton, which List strongly supported, and which became a core tenet of the traditions following Hamilton and List. Their point was that a balanced development of all vital branches, would not only mutually inspire and ignite these; and thus fuel the productive forces, but indeed also make this union strong and able to resist foreign disturbances.<sup>402</sup>

## **6.12 Agriculture most productive**

For Alexander Hamilton's free trade adversaries, however, agriculture was to be preferred to artificial industries, since manufactured products can be bought less expensive from abroad,

"If, contrary to the natural course of things, an unseasonable and premature spring can be given to certain fabrics, by heavy duties, prohibitions, bounties, or by other forced expedients; this will only be to sacrifice the interests of the community to those of particular classes. Besides the misdirection of labour, a virtual monopoly will be given to the persons employed on such fabrics: and an enhancement of price, the inevitable consequence of every monopoly, must be defrayed at the expense of the other parts of society. It is far preferable, that those persons should be engaged in the cultivation of the earth, and that we should procure, in exchange for its productions, the commodities, with which foreigners were able to supply us in greater perfection, and upon better terms." (quoted by Hamilton, 1790-1791, p. 116)

Adam Smith has more elaborated reasons for resisting the temptation to industrialise; as the Physiocrats, he argues that agriculture is more productive. Moreover, as is usual, Smith sees no difference between the private economy of individuals and that of the country. In addition, as usual he sees growth as a result of saving,

When the capital of any country is not sufficient ... as a greater share of it is employed in agriculture, the greater will be ... the value which its employment adds to the annual produce of the land and labour of the society.  
...

---

<sup>402</sup> Discussed in the section, *Perfecting the balanced harmony of productive powers*, in chapter 4.

The capital of all the individuals of a nation is increased in the same manner as that of a single individual by their continually accumulating and adding to it whatever they save out of their revenue. (Smith, 1776, book II, ch. V, p. 366)<sup>403</sup>

Smith continues by saying that agriculture was the reason why America was so prosperous, and America would fall into ruin if they industrialised; stopped buying European manufactured products; and took over the coastal and foreign trade themselves. In other words, America should be content with being a colony fully dependent of the British Empire,

It has been the principal cause of the rapid progress of our American colonies towards wealth and greatness that almost their whole capitals have hitherto been employed in agriculture. (Smith, 1776, book II, ch. V, p. 366)<sup>404</sup>

---

<sup>403</sup> The whole quotation reads: “When the capital of any country is not sufficient for all those three purposes, in proportion as a greater share of it is employed in agriculture, the greater will be the quantity of productive labour which it puts into motion within the country; as will likewise be the value which its employment adds to the annual produce of the land and labour of the society. After agriculture, the capital employed in manufactures puts into motion the greatest quantity of productive labour, and adds the greatest value to the annual produce. That which is employed in the trade of exportation has the least effect of any of the three.

The country, indeed, which has not capital sufficient for all those three purposes has not arrived at that degree of opulence for which it seems naturally destined. To attempt, however, prematurely and with an insufficient capital to do all the three is certainly not the shortest way for a society, no more than it would be for an individual, to acquire a sufficient one. The capital of all the individuals of a nation has its limits in the same manner as that of a single individual, and is capable of executing only certain purposes. The capital of all the individuals of a nation is increased in the same manner as that of a single individual by their continually accumulating and adding to it whatever they save out of their revenue. It is likely to increase the fastest, therefore, when it is employed in the way that affords the greatest revenue to all the inhabitants of the country, as they will thus be enabled to make the greatest savings. But the revenue of all the inhabitants of the country is necessarily in proportion to the value of the annual produce of their land and labour.” (Smith, 1776, book II, ch. V, p. 366)

<sup>404</sup> The rest of the quotation reads: “They have no manufactures, those household and courser manufactures excepted which necessarily accompany the progress of agriculture, and which are the work of the women and children in every private family. The greater part both of the exportation and coasting trade of America is carried on by the capitals of merchants who reside in Great Britain. Even the stores and warehouses from which goods are retailed in some provinces, particularly in Virginia and Maryland, belong many of them to merchants who reside in the mother country, and afford one of the few instances of the retail trade of a society being carried on by the capitals of those who are not resident members of it. Were the Americans, either by combination or by any other sort of violence, to stop the importation of European manufactures, and,

Against Smith's renunciation of the benefit of protective measures, as being costly outlays, reducing saving and weakening a nation's power of acquiring capital, List claims that Smith thinks like a rentier and a bookkeeper (it's all numbers; and all expenditures are of the same nature). As opposed to an industrialist or a farmer for that matter, or even to a family, for whom investments are of a different nature than consumption. List argues that investments will be paid back in the long term by a gain in productive power,

If, therefore, a sacrifice of *value* is caused by protective duties, it is made good by the gain of a *power of production*, which not only secures to the nation an infinitely greater amount of material goods, but also industrial independence in case of war. (List, 1841a, p. 145)

### 6.13 The inadvisability of supporting manufactures

Adam Smith attacked differential treatment of branches on the ground of his capital and growth theory, which claimed that growth was due to 1) increased division of labour in larger markets increased by more free trade, and 2) increased employment dependent on accumulation of capital due to saving of revenue (assuming a fixed proportion between labour and capital).

Smith's argument was therefore that artificial regulation of commerce would only divert capital's natural flow towards the most profitable activities, and therefore reduce accumulation and hence –growth,

The industry of the society can augment only in proportion as its capital augments, and its capital can augment only in proportion to what can be gradually saved out of its revenue. But the immediate effect of every such regulation is to diminish its revenue, and what diminishes its revenue is certainly not very likely to augment its capital faster than it would have augmented of its own accord had both capital and industry been left to find out their natural employments. (Smith, 1776, book IV, ch. II)

Smith's argument is logical, but only because of his premises, where he generalises and fails to see: any differences between the profitability of different activities; any difference between the present and the future; Smith fails to open up for the dynamic possibility that new lucrative trades can be planned for and deliberately learnt. List comments that Smith forgets both mental and bodily abilities,

---

by thus giving a monopoly to such of their own countrymen as could manufacture the like goods, divert any considerable part of their capital into this employment, they would retard instead of accelerating the further increase in the value of their annual produce, and would obstruct instead of promoting the progress of their country towards real wealth and greatness. This would be still more the case were they to attempt, in the same manner, to monopolize to themselves their whole exportation trade." (Smith, 1776, book II, ch. V, pp. 366-367)



In the above-named argument lies the chief proof of the school against the protective commercial policy. ... Adam Smith has merely taken the word capital in that sense in which it is necessarily taken by rentiers or merchants in their book-keeping and their balance-sheets, namely, as the grand total of their values of exchange in contradistinction to the income accruing therefrom.

He has forgotten that he himself includes (in his definition of capital) the mental and bodily abilities of the producers under this term.

He wrongly maintains that the revenues of the nation are dependent only on the sum of its material capital. (List, 1841a, pp. 225-226)

In his famous *Report on Manufactures*, to the US Congress in 1791, Alexander Hamilton, the US Treasury Secretary, quoted his adversaries, who warned against giving any direction to manufactures,

There are still, nevertheless, respectable patrons of opinions unfriendly to the encouragement of manufactures. The following are, substantially, the arguments by which these opinions are defended: ...

"To endeavor, by the extraordinary patronage of government, to accelerate the growth of manufactures, is, in fact, to endeavor, by force and art, to transfer the natural current of industry from a more to a less beneficial channel. Whatever has such a tendency, must necessarily be unwise; indeed, it can hardly ever be wise in a government to attempt to give a direction to the industry of its citizens. This, under the quick-sighted guidance of private interest, will, if left to itself, infallibly find its own way to the most profitable employment; and it is by such employment, that the public prosperity will be most effectually promoted. To leave industry to itself, therefore, is, in almost every case, the soundest as well as the simplest policy." (Hamilton, 1790-1791, p. 116)

So, the argument has since been heard from mainstream free traders that it is not advisable to subsidy one's own industry – not even when it is faced with foreign subsidies of foreign produce. Then, the argument goes, one shall be thankful for the gifts the foreigners are so stupid as to give away. List comments, however, that short-term pecuniary gains are inferior to long-term and lasting gains in the powers of production,

Into what mistakes the prevailing economical school has fallen by judging conditions according to the mere theory of values which ought properly to be judged according to the theory of powers of production, may be seen very clearly by the judgment which J. B. Say passes upon the bounties which foreign countries sometimes offer in order to facilitate exportation; he maintains that 'these are presents made to our nation.' (List, 1841a, p. 145)

Russia's leading politician before the Revolutions, Sergei Witte, similarly fought against arguments of the need for a "natural" economic development,

During my tenure as finance minister, industry grew so rapidly that it could be said that a Russian national industrial system had been established. This was made possible by the system of protectionism and by attracting foreign capital.

I was criticized by some blockheads for building up industry too rapidly. Also I was criticized for using "artificial means" in promoting industry. What does this stupid word mean? By what other means than artificial can industry develop? Everything that man does is, to a certain degree, artificial.... and the artificial means I employed were far weaker than those employed for the same means by other states. This, of course, our salon ignoramuses do not know.

There is a common complaint that I was too liberal in handling out State Bank loans to industry. This is not so. In the first place .. it is ridiculous that such a sum of money could have provided the "artificial means" for giving birth to the industry of such a country as the Russian Empire. In the second place, a good part of these loans went to nobles turned industrialists, men who either belonged to the court camarilla or who had ties with that group.

Generally speaking, the importance of industry to Russia is not appreciated or understood. Only a few men, like Mendeleev - that great scientist and scholar and my devoted associate and friend - understood its importance and tried to enlighten the Russian people about it. (Witte, 1990, pp.320-321)

The history of resisting differential treatment of branches is as old as the policy itself, since any branch in disfavour would protest. Smith's common sense argument is that entrepreneurs, due to their hands-on know-how, are superior to state bureaucrats in picking winners a market. Therefore, the market should be left alone and thereby let entrepreneurs do what only they do best; earn money. Smith also warns against the large power of such a bureaucracy,

What is the species of domestic industry which his capital can employ, and of which the produce is likely to be of the greatest value, every individual, it is evident, can, in his local situation, judge much better than any statesman or lawgiver can do for him. The statesman who should attempt to direct private people in what manner they ought to employ their capitals would not only load himself with a most unnecessary attention, but assume an authority which could safely be trusted, not only to no single person, but to no council or senate whatever, and which would nowhere be so dangerous as in the hands of a man who had folly and presumption enough to fancy himself fit to exercise it. (Smith, 1776, book, IV, Ch. II, p. 456)

There is little reason to doubt the claim that entrepreneurs in a market are the best judges of this market, but as List argues: A single company (or even a whole branch) has a much narrower task than the state, which is obliged to promote *all* branches and general welfare for the whole nation, by internal improvement of the nation. A state's task is therefore to prioritise and discriminate between branches, in the national interest. Many economic activities and branches have the character of public goods and display underinvestment, leading to the need for

action from a “macro agent” with the general welfare at sight. Regarding the dangers of a powerful bureaucracy, Max Weber developed this and the idea of a rational division of labour into a critical theory of bureaucracy.<sup>405</sup>

Japan took the consequence of this danger by arranging public bureaucracy in a way that favoured hands on experience. Concerning the particular ways of Japanese ‘indicative’ planning, Wassilij Leontieff<sup>406</sup> writes the following in his review of Prof. Shigeto Tsuru's book *Japan's capitalism, creative defeat and beyond*:

In this connection one can quote the answer given by a young Japanese corporate executive when he was asked why the powerful, private, business organisations seem to have accepted the voluntary “indicative” suggestions - received from MITI and other governmental agencies long after such advice ceased to be mandatory: “We have placed in our government” (he really meant, government bureaucracy) “our wisest, best educated, and best informed people. No wonder we are prepared to follow their advice.”

Co-ordinating planning was successfully used in making what the author describes as “anticipatory” public investment that involved the creation of factory sites, by reclamation along with providing such infrastructure as ports and feeder roads. (Leontieff, 1994)

## **6.14 Tariffs shall primarily promote stability of home markets**

To List, tariffs shall primarily promote the stability of home markets. The second role of tariffs was to restructure the industrial makeup of a country; and obtaining revenue for the authorities only came third.

List claims that when free trade is interrupted by hostile actions of other states, one must take defensive measures,

... the division of labour and the co-operation of productive powers follows automatically from the adoption of the policy of free trade. But if the natural growth of the economy is hindered by the hostile political actions of other states it would be foolish to expect that the same growth will take place that would have occurred if universal free trade existed. In such circumstances a nation can expect the industrial sector of the economy to grow

---

<sup>405</sup> Cf. e.g. Weber, 1904 and 1922. Critical theories of bureaucracies were also developed by other German economists; such as Weber's student and Syndicalist/Fascist Robert Michels' ... *Study of the Oligarchical Tendencies of Modern Democracy* (Cf. Michels, 1911) and the ‘semi-anarchist’ Franz Oppenheimer's *The State* (teacher of German chancellor Ludwig Erhard, Cf. Oppenheimer, 1905). See also the section, *A pragmatic social-conservative?*, in chapter 5.

<sup>406</sup> Wassilij Leontieff is regarded as the father of input-output analysis. His dissertation at the University of Berlin in 1928 under the direction of Werner Sombart, concerned *Circular Flows in Economics* (Leontieff, 1928). Leontieff was President of the Econometric Society and a Nobel Laureate in 1973. Three of his doctorate students also became Nobel Laureates; Paul Samuelson (1970), Robert Solow (1983) and Vernon L. Smith (2002).

only if defensive measures are taken through political action. (List, 1837a, Letter II, pp. 32-33)

List saw many advantages with tariffs, and his emphasis depended somewhat on the issue discussed. Nevertheless, he usually stressed that the primary role of tariffs was to secure a nation's people,

The object of a tariff is to frustrate any hostile action by foreigners to harm a country's economy by political action or by acts of war. While achieving its immediate object a protective tariff will also foster the natural and normal expansion of home industries. (List, 1837a, p. 33)

List argues that it is better to prepare for stability and protect, than to mend injuries afterwards,

We may rest assured that it is (as a rule) incomparably easier to perfect and extend a business already established than to found a new one. (List, 1841a, p. 294)

List repeatedly explains the dangers of business cycles and declares that the stability of the home market is the most important precondition for a flourishing society, and therefore as the most important reason for protective tariffs. Indeed, chapter 24 of the *National System* is entitled, '*Manufacturing power and the principle of stability and continuity of work*' (List 1841a, p. 294).

There is a general rule applicable to all undertakings that has been entirely overlooked by the founders and disciples of the cosmopolitical theory, ... This rule is *steadiness* in prosecuting a branch .... (List, 1827b, p. 111)

Anyone who has tried to estimate profitability of investments and the related gross uncertainties would acknowledge the truth content in List's opinion. Repeated and rampant budget overruns in both private and public enterprises are testimony to this.<sup>407</sup> List's opinion in 1827 is supported in 2010 by Richard Lambert, the head of the Confederation of British Industry, who says that,

... what business has the strongest interest in is economic stability. (BBC, 2010)

---

<sup>407</sup> Just one example among many possible; *Statoil* is the largest company in Norway and has 40 years of experience with cost estimation for very large offshore projects. The cost of the gas field project *Snow White* ('Snøhvit') offshore Northern Norway was in 2002 estimated at € 5 billion, but by September 2005 the cost estimate was up by 50% to € 7.5 billion. When the project was finished in 2010, the profitability of the *Snow White* project was threatened further, by a 48% fall in natural gas prices from 2009 to 2010. In this way, the rate of costs to selling price increased with a factor of three!

## 6.15 Protection of fragile mental capital

List claims that stability and continuity of work in agriculture, is important, but agriculture quickly recovers,

... continuity has an important influence on agriculture, yet that interruptions to it, in the case of that industry, are much less decided and much less injurious when they occur, also that their evil consequences can be much more easily and quickly made good than in the case of manufactures. However great may be any damage or interruption to agriculture, ...

Even after devastations by war it quickly raises itself up again. (List, 1841a, p. 297)

According to List, manufactures are much more fragile than agriculture. In a longer crisis material capital will be lost, but retained in a shorter interruption. Mental capital, however, will vapour even by a short interruption. Craftsmen need a daily income and will soon emigrate to other branches, regions, or even countries. During longer interruptions, even skill itself will be lost and networks will dissolve. This risk is higher the more complex and specialised the industry is,

On manufactures, however, the least and briefest interruption has a crippling effect; a longer one is fatal. The more art and talent that any branch of manufacture requires, the larger the amounts of capital which are needful to carry it on, the more completely this capital is sunk in the special branch of industry in which it has been invested, so much the more detrimental will be the interruption. By it machinery and tools are reduced to the value of old iron and fire-wood, the buildings become ruins, the workmen and skilled artificers emigrate to other lands or seek subsistence in agricultural employment. Thus in a short time a complex combination of productive powers and of property becomes lost, which had been created only by the exertions and endeavours of several generations. (List, 1841a, p. 298)

## 6.16 Stability furthered by closeness

- *between productive groups and between production and consumption*

List claims that one flourishing branch of industry pulls along other industries, as Michael Porter claimed in his cluster theory (Porter, 1990), and vice versa; when one branch is interrupted so are other branches in a nation.

One 'personal' example may be when the last shipyard, *Tangen verft*, was closed down in my birth town Kragerø, on the southeast coast of Norway.<sup>408</sup> Not only did 300 skilled workers lose their jobs, but also ac-

---

<sup>408</sup> Due largely to large national oil revenues, a high interest rate, a strong currency, and therefore loss of competitive power for industry. My birth town lost 40 % of its industrial jobs in one year.

according to the director of the largest engineering company in the county, *Grenland Offshore*, three times as many lost their jobs in the supply companies in the region. Furthermore, qualified young workers moved to other areas to find jobs, resulting in less demand in local shops and less children in the schools. This resulted in shops closing down, threatening the attractiveness and competitiveness of the whole town - as a desirable shopping centre in the region. The process of scaling down also resulted in less tax revenue transferrals to the municipality, and brought along a very painful readjustment of the municipality, especially the school structure, but also social welfare for exposed groups. The process started in 2002, and has in 2012 not yet reached its climax.

The more advanced and complex the national economy is, the broader and deeper are the interruptions, and ultimately the whole confederation of national labour will be damaged more or less permanently. The recognition of this specific danger is the original reason why protective duties were thought of, List claims,

Just as by the establishment and continuance of industry one branch of trade originates, draws after it, supports and causes to flourish many others, so is the ruin of one branch of industry always the forerunner of the ruin of several others, and finally of the chief foundations of the manufacturing power of the nation.

The conviction of the great effects produced by the steady continuation of industry and of the irretrievable injuries caused by its interruption, and not the clamour and egotistical demands of manufacturers and traders for special privileges, has led to the idea of protective duties for native industry. (List, 1841a, p. 298)

Furthermore, List often discusses the interrelationship between consumption and production, and argues that development of domestic consumption is important to secure domestic production, both in manufacture and in agriculture.<sup>409</sup> Furthermore, both agriculture and manufacture will prosper by geographic closeness and stable exchanges. List likens the situation of being under the same political administration to the stability of persons being under the same roof in a factory,

In like manner the entire manufacturing industry of a State in connection with its agricultural interest, and the latter in connection with the former, will prosper the more the nearer they are placed to one another, and the less they are interrupted in their mutual exchanges with one another. (List, 1841a, p. 151)

Events e.g. in 2011, illustrate the relevance of List's point. The huge economic rippling effects of the Japanese earthquake and tsunami on

---

<sup>409</sup> Events e.g. in 2011, illustrate the relevance of List's point. The huge economic rippling effects of the Japanese earthquake and tsunami on JIT – just in time - deliveries have awakened the world to the dangers of global dependencies and lack of any kind of defence thereto.

JIT – just in time - deliveries have awakened the world to the dangers of global dependencies and lack of any kind of defence thereto.

Illustrating the point further with an historical example, in the London *Financial Times*, the Oxford historian, Bryan Ward-Perkins uses the example of the utter collapse of the British economy, after the Roman withdrawal in 410 A.C. This illustrates the dangers and fragility of today's complex society. Britain then used close to seven centuries only to regain its complex and high degree of civilisation. Ward-Perkins claims that the situation today is far more fragile, and concludes, "If our economy ever truly collapses, the consequences will make fifth-century Britain seem like a picnic." This puts List's message regarding stability into a larger historical perspective. Ward-Perkins writes,

The Romano-British population had grown used to buying their pottery, nails, and other basic goods from specialist producers, based often many miles away, and these producers in their turn relied on widespread markets to sustain their specialised production. When insecurity came in the fifth century, this impressive house of cards collapsed, leaving a population without the goods they wanted and without the skills and infrastructure needed to produce them locally. It took centuries to reconstruct networks of specialisation and exchange comparable to those of the Roman period.

The more complex an economy is, the more fragile it is, and the more cataclysmic its disintegration can be. Our economy is, of course, in a different league of complexity to that of Roman Britain. Our pottery and metal goods are likely to have been made, not many miles away, but on the other side of the globe, while our main medium of exchange is electronic, and sometimes based on smoke and mirrors. If our economy ever truly collapses, the consequences will make fifth-century Britain seem like a picnic. (Ward-Perkins, 2009)

The more complex a society and its economy the more fragile it is. The more a nation is dependent upon other nations and markets, the more fragile it is, since it does not control outside factors.

While promoting closeness and stability, List also promotes efficient transport, which undermines the former. List does not point out this dilemma and inconsistency.

To make more sense of List's propensities, he would have to claim that closeness took priority over efficient transport, which likewise is sound logistics and fair economic reasoning. Indirectly therefore, we might argue that List promotes only "necessary" transport, which of course is sound logistics and fair economic reasoning. -

A few years later, Henry Charles Carey, also argued for closeness. Henry Carey was the son of List's Irish-American friend Mathew Carey, and an advisor to US President Abraham Lincoln on economic policy. Carey relates the creation of a home market to the urgency of avoiding commercial crisis. He points out that the object of protection is to bring consumption and production close to another, stabilising both them and the domestic currency, as well as increasing the value of land and labour. Carey writes in his *Harmony of Interests* that,

The nearer the consumer and the producer can be brought to each other, the more perfect will be the adjustment of production and consumption, the more steady will be the currency, and the higher will be the value of land and labour. The object of protection is to accomplish all these objects, by bringing the loom and the anvil to take their natural places by the side of the plough and the harrow, thus making a market on the land for the products of the land. (Carey, 1851, p. 190)<sup>410</sup>

Carey studied these "disturbing causes" further in his *Financial crisis: their causes and effects* (Carey, 1864), he claims that throughout US history, prosperity has accompanied protection and crisis and paralysis has accompanied free trade. He argues in favour of extending the home market and claims that regularity in commerce free people,

The nearer the consumer to the producer the more instant and the more regular the exchanges of service, ...if we should avoid those crises ... if we would have the regularity of the societary movement - and if we should promote the growth of freedom - we must adopt the measures needed for bringing together the producers and consumers of food and wool, and thus augmenting their power to have commerce among themselves. The essential characteristic of barbarism is found in instability and irregularity of social action. ... you will most assuredly be led to the conclusion, that the stability whose absence you deplore, is to be sought by means of measures looking to the close approximation of the producer and the consumer and to the extension of domestic commerce. ... All experience, abroad and at home, tends, thus, to prove that men become more free as the domestic commerce becomes more regular, and less and less free as it becomes more fitful and disturbed. Such being the case, the questions as to the causes of crises, and as to how they might be avoided, assume a new importance ... (Carey, 1864, Letter First)

Carey finds the causes of financial crises to lie in speculation that is made possible in periods with free trade, since these periods are also accompanied with a buyer's market in the labour market. (Cf. Carey, 1864, Letter Second)

### **6.17 Creation of a home market & feed-back mechanisms**

List's strategy concerns, in particular, active fostering of infrastructure and of know-how, and concerning the latter, protection of infant industries as against foreign superiority. Furthermore, as mentioned above, the strategy includes a balanced development of all vital sectors of a modern economy, agriculture, manufacturing, and commerce. These would complement and support each other, as well as establish a high

---

<sup>410</sup> A part of this quotation has also been used in the section above, *Dangers of monoculture – commodities especially*.



degree of self-sufficiency and robustness against foreign disturbances, as in the British Imperial strategy of self-containment.<sup>411</sup>

This strategy would thereby create a protected home market that List regards as absolutely crucial for the development of a particular new and young industry (Cf. List, 1841a, pp. 24, 186-187, 191). Furthermore, this would promote urbanisation and further elevation of civilisation.<sup>412</sup>

Control over the consumption of a nation's production makes stable production conditions more likely and thereby provides for stable progress in a nation's welfare, as List outlined in chapter 24: *The Manufacturing Power and the Principle of Stability and Continuity of Work* (List, 1841a, p. 294). List argues that possession of the home market enables infinitely greater consumption, and implicitly greater domestic production (or in other words development towards a perfectly balanced economy),

... every nation which gains entire possession of its own home market for manufactures, gains in the course of time, by its home production and consumption of manufactured goods, infinitely more than the nation which has hitherto provided the former with manufactured goods loses by being excluded; because a nation which manufactures for itself, and which is perfectly developed in its economical conditions, becomes more than proportionately richer and more populous, consequently is enabled to consume infinitely more fabrics, than it could import while depending on a foreign manufacturing nation for its supply. (1841a, p. 191)

Regarding production, List argues that as long as international commerce is interrupted by wars, commercial disputes, a nation must primarily focus on perfecting the national confederation of labour. In other words, in unstable times, focus must be on improving the home market,

The international co-operation of productive powers is, however, a very imperfect one, inasmuch as it may be frequently interrupted by wars, political regulations, commercial crises, &c. Although it is the most important in one sense, inasmuch as by it the various nations of the earth are connected with one another, it is nevertheless the least important with regard to the prosperity of any separate nation which is already far advanced in civilisation. This is admitted by writers of the popular school, who declare that the home market of a nation is without comparison more important than its foreign market. It follows from this, that it is the interest of every great nation to make the national confederation of its productive powers the main object of its exertions, and to consider their international confederation as second in importance to it. (List, 1841a, p. 139)

---

<sup>411</sup> Cf. Gipson, 1954, p. 25, and the sections *Confederation of Labour*, and *Perfecting the balanced harmony of productive powers* in chapter 4.

<sup>412</sup> See the section, *Urbanisation furthers communication, innovation and freedom*, in chapter 4.

List' argues that industry will induce consumption of its own products and also make consumption of domestic agricultural products independent of foreign demand, thereby securing domestic agricultural production, which makes the nation more affluent, and which again increases consumption; and all this in a positive feed-back loop,

Production renders consumption possible, and the desire to consume incites to production. The mere agricultural nation is in its consumption dependent on foreign conditions, and if these are not favourable to it, that production dies out which would have arisen in consequence of the desire to consume. But in that nation which combines manufactures with agriculture in its territory, the reciprocal inducement continually exists, and therefore, also, there will be continuous increase of production and with it augmentation of capital on both sides. (List, 1841a, p. 233)

Protection would serve to safeguard the home market of consumption for domestic producers. List stresses the importance of the home market as worth more than export markets (List 1841a, pp. 24, 186–7, 191, 194), and points out that this also was the opinion of the orthodox school; Cooper estimates 10-12 times higher importance and Smith even estimates 24 times higher importance of the home market (Cf. List's footnote),

Smith and Say<sup>413</sup> themselves estimate the amount of internal industry a great deal higher than foreign commerce; ... Mr. Cooper estimates it from ten to twelve times higher... to be quite moderate we will follow Mr. Cooper. (List, 1827b, p. 109)

Therefore actually basing his arguments also on the claims of the Smith, Say, and Cooper, List attacks the allegations of Adam Smith etc. that any product that may be bought cheaper abroad, should be bought there instead of creating a home market for this domestically produced product. The internal market is more important than export markets due e.g. to feedback mechanisms.<sup>414</sup> List claims,

---

<sup>413</sup> 85) ... Smith and Say; compare Smith, *Wealth*. Book II. Chapter V: "A capital, therefore, employed in the home trade will sometimes make twelve operations, or be sent out and returned twelve times, before a capital employed in the foreign trade of consumption has made one. If the capitals are equal, therefore, the one will give four and twenty times more encouragement and support to the industry of the country than the other." Compare Say, *Traite*, Vol. I, Chapter IX, pages 85, 86: "En tout pays, le commerce exterieur qui se fait est peu considerable, compare au commerce interieur ... Outre qu'en tout pays le commerce interieur, ... est le plus considerable, c'est aussi le plus avantageux." List later discussed this issue frequently, compare, "Über die Beziehungen der Landwirtschaft zur Industrie und zum Handel" (On the Relationship of Agriculture to Industry and to Trade), *Werke*. Vol. 5. (List's note and commentary, from List, 1929-36, *Werke*, vol. II, pp. 349-404, translated by George Gregory)

<sup>414</sup> As discussed e.g. in the section above, *Stability furthered by closeness*.

The school cannot deny that the internal market of a nation is ten times more important to it than its external one, even where the latter is in the most flourishing condition; but it has omitted to draw from this the conclusion, which is very obvious, that it is ten times more important to cultivate and secure the home market, than to seek for wealth abroad, and that only in those nations which have developed their internal industry to a high degree can foreign commerce attain importance. (List, 1841a, p. 186)

List also claims that control over the home market is an early stepping-stone for an export strategy. In addition, as economics of scale- and competition increase, this will eventually lower domestic prices, as he had experienced in the USA. In the long run, the effect of protection and increased international competition is therefore cheaper products,

... a manufacturing Power which exclusively possesses its home market can work so much the cheaper for foreign trade. ... for in the same proportion in which the German manufacturers have acquired possession of their home market, their export of manufactured goods has also increased. Thus the recent experience of Germany, like the ancient experience of England, shows us that high prices of manufactured goods are by no means a necessary consequence of protection. (List, 1841a, p. 396-397)

## **6.18 Protecting banks by securing home markets**

To promote production, implement inventions and build infrastructure, a stable and sound credit system is vitally important, as e.g. Alexander Hamilton understood.<sup>415</sup>

List also paid much attention to the credit system.<sup>416</sup> This was due to his interest in the function of the national union of labour, as well as his interest in the experiences of various crises and their effects, related to both domestic real estate booms and busts, and related to international balance of payments. List says that many of the effects of disruption have long-term effects, and that repetitions are ruinous for society,

It cannot afford any great consolation to the North American that in consequence of bankruptcies and diminished consumption, the imports and exports between both countries are at a later period restored to a tolerable proportion to one another. For the destruction and convulsions of commerce and in credit, as well as the reduction in consumption, are attended with disadvantages to the welfare and happiness of individuals and to public order, from which one cannot very quickly recover and the frequent repetition of which must necessarily leave permanently, ruinous consequences. (List, 1841a, p. 280-281)

---

<sup>415</sup> Cf. his *Reports of the Secretary of the Treasury of the United States, on Public Credit, on a National Bank, on Manufactures, and on the Establishment of a Mint* (Hamilton, 1790-1791).

<sup>416</sup> Cf. e.g. his *Chapter 23: The Manufacturing Power and the Instrument of Circulation* (List, 1841).

List describes the devastating results in the USA after the markets were opened for import after the war against Great Britain in 1812. List claims that the domestic banks did not cause the calamities originally, but rather that the instability was imported,

Look fourteen years back; had the United States Government, immediately after the last war, protected manufacturing industry, wheat, wages, land prices, profits would never have sunk so low; banks would never have been ruined; not the tenth part of the citizens would have been expelled from house and home. This distress of so many land proprietors arose not chiefly from the bank mania, as it was generally believed, but from a revolution in the prices of produce and land caused by the dependence on foreign markets, foreign fluctuations of prices, foreign regulations and restrictions. (List, 1827b, p. 131)

List argues that to secure a sound credit system and therefore a stable banking system, production must be secured a home market. If so, then the banking system will act as a productive power. However, in an open economy, the banking system often destroys industrial credit. In the following example List takes his example from agriculture, and indicates the crucial role of the financial system,

The price of land, and the possibility of converting it into money, rises and falls with the price of the produce. ... Every cause, therefore, which effects a fall of the prices of the raw products, effects likewise a fall of the land prices and of the country bank business, and vice versa. The principal condition of a banking system like this is, therefore, steadiness of the market of the agricultural products, effectuated by a national system, which prevents great fluctuation, which can only be attained by securing the home market to the products by a manufacturing industry. Under this condition, a banking system works as a productive power, whilst in an open country it destroys from time to time the roots of industry CREDIT. (List, 1827b, p. 131, List's own capital letters)

List also describes a real estate boom and the following bust, which destroys morals, industry and credit 'for 50 years',

If such a state of things only lasts for some years, and then breaks at once, it will always break the majority of the citizens, and destroy the morals, the industry and the credit of the country, for half a century.

In Germany we saw the same effects from the same causes ... (List, 1827b, p. 133)

## **6.19 Tariffs shall secondarily promote skills and liberty**

Mental aspect of trade theory: Wilful learning

Most writers, who describe List's ideas, normally focus on his trade theory but seldom even mention the roots of his theory. The roots are, 'immaterial'.

Ricardo's trade theory advises to stay with your original trade, what you do best now. List argues that a nation needs to plan strategically what it wants to engage in. It has to choose its profession like any youngster choosing his life's profession. List then argues that industry brings more advantages than producing commodities; and that industry can be learnt. Learning is therefore core to List's dynamic view of how a nation's circumstances can be changed, wilfully, like with any youngster.

The means was a spiritual elevation of all individual citizens, in order to reach the ultimate goal, an elevation of the global civilisation. His example of the family that invested in the education of their children and reaped the benefits years later, outweighing the initial outlays, was used to illustrate the necessity of investments in infant industry. Similarly and with time, the youngsters would eventually be able to pay back the costs they had procured upon their parents. With the growth of know-how, infant industries would emerge as competitive on the international market and would be able to pay back to the nation the initial burden it had carried for the education of skill and know-how in the infant industries. Moreover, he argues, education requires temporary sacrifice for future prosperity,

The nation must sacrifice and give up a measure of material property in order to gain culture, skill, and powers of united production; it must sacrifice some present advantages in order to insure to itself future ones. (List, 1841a, p. 144)

The German term for an infant industry tariff was *Erziehungszoll* (education tariff) as opposed to *Schutzzoll* (protection tariff) for "grandfather industries". This scheme constituted the basis of his plan for the German Customs Union (the *Zollverein*) that eventually, he hoped ... would be the seed of a customs union that would include all of Continental Europe.

His plans for a national railway system in Germany (Cf. List, 1838) was the second part of this larger scheme – like "Siamese twins" – and it would be connected to his "East-West" railway from Belgium to Bagdad and further on to Bombay in India.<sup>417</sup>

## 6.20 Education tariff – the English model

---

<sup>417</sup> On my way to the University in Erfurt, I daily crossed *Friedrich List Straße*. The street sign bears a short description of List, which is illuminating of his reputation in Germany today. It reads: Friedrich List was the spiritual father of the German railroad network. ("Friedrich List war der geistiger Vater des deutschen Eisenbahnnetzes")

List describes the difficult situation for the newcomer in more detail, and claims that the customer cannot be expected to pay for the “education” of domestic newcomers,

The more knowledge, experience, and skill are wanted for a particular business, the less individuals will be willing to devote themselves to it, if they have not a full assurance of their being able to make a living by it for their whole lifetime.

Every new business is connected with great losses by want of experience and skill for a considerable time. The advancement of every kind of manufactories, depends upon the advancement of many other kinds, upon the proper construction of houses and works, of instruments and machinery. All this makes the commencement of a new undertaking extremely difficult, whilst the undertakers have to contend with a want of labourers of skill and experience; the first cost of starting a business is the heaviest of all, and the wages of the unskilled labourers in countries which commence manufactories, are higher than the wages of the skilled ones in old manufacturing countries. All cost double prices, and every fault in starting the business causes heavy losses, and sometimes the failure of the whole undertaking. The undertakers possess moreover, in most cases, not a sufficient knowledge of the ways and means to get the first materials profitably, and whilst they are struggling against all these difficulties, they have great exertions to make to get customers, and often to contend with the prejudices of their countrymen, who, not willing to leave their old way in doing business, are in most cases in favour of the foreign manufactories.

Often they may be right. New establishments are seldom able to procure such finished articles in the first and second year, as they would in the third and fourth, if supported, and nevertheless their articles must be sold higher. It cannot be expected that the consumers, as individuals by their own accord, should support a manufactory, by purchasing less accomplished articles at higher prices, even if convinced that, in purchasing them, they would encourage the manufactures to improve their products, and to procure them after a while cheaper than foreign manufactures. (List, 1827b, pp. 48-49)

Therefore, given that a less developed country wants to develop its own industry, its government has no option but to level the playing field for its infant industries, in order to give them more even opportunities. This can be done by giving protection to investments in capital and skill, by temporarily raising tariffs. This is a weak version of the parallel of giving a temporary monopoly and protection to intellectual investment by allowing patents,

List continues by saying that each failure is harmful because it is a discouragement to other entrepreneurs, and because it reduces their chances of finding support,

All these circumstances are the cause why so many new establishments fail if let alone. Every failure breaks a man, because the greater part of their expenditure in building machinery, in procuring labourers from abroad, etc. is lost. One example of such a failure effects a discouragement of all other new undertakings, and the most advantageous business cannot find afterwards a support from capitalists.

In old manufacturing countries we observe quite the contrary.... (List, 1827b, p. 49)

List explains the British practice of importing skill from more developed nations on several occasions (Cf. List, 1841a, pp. 39; 111) as a process of planting an (immaterial) tree in hostile surroundings and therefore protecting and caring for the newcomer with the utmost diligence, using a “system of restrictions, privileges, and encouragements”,

The island kingdom borrowed from every country of the Continent its skill in special branches of industry, and planted them on English soil, under the protection of her customs system. Venice had to yield (amongst other trades in articles of luxury) the art of glass manufacture, while Persia had to give up the art of carpet weaving and dyeing. Once possessed of any one branch of industry, England bestowed upon it sedulous care and attention, for centuries treating it as a young tree which requires support and care. (List, 1841a, p. 39)

These effects were learned generally by Great Britain from the trade and manufacturing industry of the Italians, the Hansards, the Belgians, and the Dutch. But having attained to a certain grade of development by means of free trade, the great monarchies perceived that the highest degree of civilisation, power, and wealth can only be attained by a combination of manufactures and commerce with agriculture. They perceived that their newly established native manufactures could never hope to succeed in free competition with the old and long established manufactures of foreigners; that their native fisheries and native mercantile marine, the foundations of their naval power, could never make successful progress without special privileges; and that the spirit of enterprise of their native merchants would always be kept down by the overwhelming reserves of capital, the greater experience and sagacity of the foreigners. Hence they sought, by a system of restrictions, privileges, and encouragements, to transplant on to their native soil the wealth, the talents, and the spirit of enterprise of the foreigners. This policy was pursued with greater or lesser, with speedier or more tardy success, just in proportion as the measures adopted were more or less judiciously adapted to the object in view, and applied and pursued with more or less energy and perseverance.

England, above all other nations, has adopted this policy. Often interrupted in its execution from the want of intelligence and self-restraint on the part of her rulers, or owing to internal commotions and foreign wars, it first assumed the character of a settled and practically efficient policy under Edward VI, Elizabeth, and the revolutionary period. (List, 1841a, p. 111)<sup>418</sup>

## 6.21 Newcomers are disadvantaged

Commenting upon all the advantages of English competitors, List emphasises the size of the home market, protection, access to inexpensive

---

<sup>418</sup> The first sentence of this quotation has been used in the section below, *Differentiate tariffs to branch of production*.

capital, -transport and -communications, and he also argues that access to a large domestic capital market is important for competitiveness, and enables increased economics of scale and competitiveness,

The possession of larger capital, a larger home market of their own, which enables them to manufacture on a larger scale and consequently more cheaply, greater progress in manufacture itself, and finally cheaper sea transport, give at the present time to the English manufacturers advantages over the manufacturers of other countries, which can only be gradually diverted to the native industry of the latter by means of long and continuous protection of their home market, and through perfection of their inland means of transport. (List, 1841a, p. 186)

List argues that the Cosmopolitical School does not understand how a less developed nation is disadvantaged within the international trade competition, and need to protect their industry,

The school fails to perceive that under a system of perfectly free competition with more advanced manufacturing nations, a nation which is less advanced than those, although well fitted for manufacturing, can never attain to a perfectly developed manufacturing power of its own, nor to perfect national independence, without protective duties. (List, 1841a, p. 316)

Catching up with leading industrial nations is a complicated, demanding, and time-consuming task.

A newcomer company in an established international branch within an advanced economy will suffer high barriers to entry, but can benefit from many happy circumstances, connected to know-how and infrastructure.

A newcomer company within a less advanced nation will suffer much higher barriers to entry, due to weaker know-how and infrastructure, in general.

A less developed country always will have a hard time establishing industry in branches where other countries are since long established, because it lacks regulatory experience, skilled pools of labour, networks of know-how and technical expertise, cheap credit and cheap transport, which the established company in the advanced economy can benefit from.

A newcomer in a less developed country will therefore be doubly discriminated against in the market. List compares the situation with a boxing match between a professional boxer and a child. Furthermore, by various methods competing established foreign companies and their government can undercut domestic newcomers with temporary price dumping, by better quality, marketing, and credit arrangements for the customer. The barriers to entry will be far higher for a newcomer from a less developed economy, and the more knowledge intensive the industry the higher the barriers.



## 6.22 Protection furthers security, freedom, and incentives

List claims that tariffs, far from encroach upon the liberty of the individual, but rather improve the opportunities of the individual- e.g. by helping entrepreneurs and industry to do things they cannot do alone.

For instance, when the state (macro agent) protects individual investments (both material and immaterial) they are more prone to take place, thereby serving both individuals and hopefully the nation at large,

... the State is not merely justified in imposing, but bound to impose, certain regulations and restrictions on commerce (which is in itself harmless) for the best interests of the nation. By prohibitions and protective duties it does not give directions to individuals how to employ their productive powers and capital (as the popular school sophistically alleges); it does not tell the one, 'You must invest your money in the building of a ship, or in the erection of a manufactory;' or the other, 'You must be a naval captain or a civil engineer;' it leaves it to the judgement of every individual how and where to invest his capital, or to what vocation he will devote himself. It merely says, 'It is to the advantage of our nation that we manufacture these or the other goods ourselves; but as by free competition with foreign countries we can never obtain possession of this advantage, we have imposed restrictions on that competition, so far as in our opinion is necessary, to give those among us who invest their capital in these new branches of industry, and those who devote their bodily and mental powers to them, the requisite guarantees that they shall not lose their capital and shall not miss their vocation in life; and further to stimulate foreigners to come over to our side with their productive powers. In this manner, it does not in the least degree restrain private industry; on the contrary, it secures to the personal, natural, and moneyed powers of the nation a greater and wider field of activity. It does not thereby do something which its individual citizens could understand better and do better than it; on the contrary it does something which the individuals, even if they understood it, would not be able to do for themselves. (List, 1841a, p. 167)

The above argument concerns very much the direct liberty of the individual citizen. List's argument that tariffs promote liberty is also suited to the situation of a nation and its sovereignty, meaning that when a nation progress, both state power and the liberty of the individual citizens benefit. According to List, individual liberty increases with the power of the nation. These effects on the citizen are indirect, but important nevertheless.

List argues that tariffs have a positive role to play in safeguarding the ordinary man's efforts to improve his lot, and thereby incentives for improvement of skilled labour, incentives for the entrepreneur, as well as incentives for the investor.

List thus argues against a dogma of the Cosmopolitical School, claiming that protection not only delivers security; Protection also furthers incentives and freedom, since it promotes security both for invested capital of the industrialists and also provide security for the develop-

ment of skills by the workman. It thus enables the investor, the industrialist and the craftsman. In this way, protection works like a patent, by securing a temporary monopoly, and therefore as a weaker form of property right. Tariffs give inducements for production both to the entrepreneur, to the workman and to the capitalist,

Protective duties act as stimulants on all those branches of internal industry the produce of which foreign countries can provide better than the home country but of the production of which the home country is capable. They guarantee a reward to the man of enterprise and to the workman for acquiring new knowledge and skill, and offer to the inland and foreign capitalist means for investing his capital for a definite and certain time in a specially remunerative manner. (List, 1841a, p. 307)

Protection and thus security serves as a kind of collateral, and therefore tariffs facilitate loans to factory owners, says List,

Protection by the imposition of a tariff enables factory owners to raise loans from capitalists. Only this protection gives the founder of a new factory the ability to secure for his undertaking the money with which to buy essential equipment. ... (List, 1837a, p. 89)

List claimed that Germany suffered due to a lack of protection for invested capital and skill,

What we lack is simply and solely a guarantee for our capitalists and artisans by which they may be protected against loss of capital and want of work. (List, 1841a, p. 426)

### **6.23 Protection promotes foreign investment**

List argues that investors are attracted to countries with protective policies - a logical argument that hardly if ever is used by international development institutions in the 21<sup>st</sup> Century, perhaps because it does not fit an accepted 'globalised' political agenda,

... by the policy of favouring native manufacture a mass of foreign capital, mental as well as material, is attracted into the country. (List, 1841a, p. 228)

In his *Outlines*, Letter 4, List argues that foreign investment from abundant countries may develop less developed countries,

Even if there were not capital and skill enough in the country they could be drawn from abroad by political measures. Under No. I. I mentioned that capital and knowledge have the tendency to extend themselves over the whole globe, and that they go from those parts where they are in superabundance to those where they are scarce. (To my knowledge the theorists neither observed this tendency, nor did they justice to it.) As this tendency

is checked by the policy etc. of other nations, so it can be restored by counteracting that policy. In securing to foreign capital and skill a premium in this country, you will attract them from abroad. The United States have this more in their power than any other nation, because they possess more capital of nature (not yet taken into possession) and more capital of mind than any other nation. (List, 1827b, Letter 4, p.71)

In agreement with List's goal of industrialisation, List's capital-protective argument applies to investments in long-term productive activity, rather than to unstable short-term investments of financial-speculation. The latter was the scourge of many countries in 1990's, culminating with the Southeast Asian crisis in 1997.

In 1988, however, Milton Friedman argues that capital inflow is a good, *without* making a distinction between short-term and long-term investment (Friedman, 1988). It may even be argued that short term investment are a good because they lubricate and 'liquidify' the capital markets which some manufacturers depend upon, in particular shipping with its demand for high and rapid movement of capital. In other words, generalisation (also about capital flows) is a risky sport, since circumstances vary with time, space and branch.

#### **a) England**

As so often is the case, List uses England as an example, and states that only advanced nations with security and protection can hope to attract financial capital, technical knowledge and skilled people. Historically, all nations that have established industry has done so by the use of protection,

In England, the most advanced industrial country in the world, the policy of protection has safeguarded capital, technical knowledge, and skilled labour. People are attracted to a country which safeguards its industries by the policy of protection because they wish to share in the advantages provided by the tariffs. ...

It cannot be denied that only advanced civilised countries - ... can hope to become industrialised by attracting English capital and technical knowledge.

The arguments that we have advanced are no mere abstract propositions. They are based upon established facts. All countries in which, under favourable circumstances, industries have been established through the policy of protection ... (List, 1837a, p. 79)

#### **b) America**

List had noticed this point in Alexander Hamilton's *Reports on Manufactures*, which he quoted in his *Outlines* (Cf. List, 1827b, p. 27fn). Hamilton writes that due to protection in America, European capitalists will be attracted,

When the manufacturing capitalist of Europe shall advert to the many important advantages which have been intimated in the course of this report, he cannot but perceive very powerful inducements to a transfer of himself and his capital - to the United States. (Hamilton, 1791, Ch. VII)

### c) **Russia**

Sergei Witte, the leading Russian politician and follower of List, strongly supported the “exploitive” use of foreign capital for domestic industrialisation. He taught Tsar Nikolai II’s brother Grand Duke Mikhail that,

No country has ever developed without foreign capital. Throughout my administration I have defended the idea of the usefulness of foreign capital. ... I declared that I was not afraid of foreign capital, that on the contrary I considered it beneficial for Russia. What I feared, I said, was that our regime is so peculiar that but few foreigners would care to have anything to do with us. Of course, foreign capital would have entered the country more abundantly if so many obstacles had not been created against it during my administration. (Witte, 1921, p. 74)

Moreover, in his memoirs, Witte writes that his success was based on protection and foreign capital,

During my tenure as finance minister, industry grew so rapidly that it could be said that a Russian national industrial system had been established. This was made possible by the system of protectionism and by attracting foreign capital. (Witte, 1991, p.322)

In his *Russia's Last Capitalists. The NEPmen, 1921-1929*. Alan M. Ball shows that also Lenin argued for the Hamiltonian principle of development through an “exploitation” of imperialism, - in agreement with US interests<sup>419</sup> and which Stalin later developed to a far grater degree in the 1930s. Ball writes,

Bukharin's contention that the NEPmen played an important role in the restoration of state industry, and hence in the development of socialism in the Soviet Union, resembled Lenin's view after 1921 that communism would have to be built in Russia with non-communist hands. Pushing this point further, Bukharin noted on a number of occasions that private entrepreneurs were also a source of tax-revenue, funds that helped nourish the industrial sector. Viewed from this perspective, the NEPmen, in spite of themselves, seemed to occupy a position in the front ranks of the movement to build the world's first socialist state.<sup>420</sup> (Ball, 1987, p.46)

---

<sup>419</sup> Cf. Sutton, 1968 and 1974.

<sup>420</sup>.... References in an endnote by Ball. My note.

#### d) China

The father of the first Chinese revolution in 1911 and its first President, Sun Yat-sen, carried these ideas further into a grand plan for an international development of China's vast territory. This manual, *The International Development of China*, resembles List's book *The German National Transport System* (List, 1838), but Sun expands this into a general plan for development.

Sun argues that China must industrialise and her workers will be "glad to welcome any capitalist who would even put up a sweat shop to exploit them." The shortest road to public profit is not through national competition, but through co-operation. In the conclusion, Sun therefore proposed an international Consortium, which would finance Chinese development and end cutthroat competition in that part of the world. Sun writes,

International war is nothing more than pure and simple organized robbery on a grand scale, which all right-minded people deplore. ... We, the Chinese people, who desire to organize China for peace will welcome heartily this new Consortium provided it will carry out the principles which are outlined in these programs. Thus, cooperation of various nations can be secured and the military struggle for individual and national gain will cease forever.

Commercial war, or competition, is a struggle between the capitalists themselves. This war has no national distinction. It is fought just as furiously and mercilessly between countries as well as within the country. The method of fighting is to undersell each other, in order to exhaust the weaker rivals so that the victor may control the market alone and dictate terms to the consuming public as long as possible. The result of the commercial war is no less harmful and cruel to the vanquished foes than an armed conflict. This war has become more and more furious every day since the adoption of machinery for production. It was once thought by the economists of the Adam Smith school that competition was a beneficent factor and a sound economic system, but modern economists discovered that it is a very wasteful and ruinous system. ...

I intend to make all the national industries of China into a Great Trust owned by the Chinese people, and financed with international capital for mutual benefit. Thus once for all, commercial war will be done away with in the largest market of the world. ...

Class war is a struggle between labor and capital. The war is at present raging at its full height in all the highly developed industrial countries. ... China, however, owing to the backwardness of her industrial development, which is a blessing in disguise, in this respect, has not yet entered into the class war. Our laboring class, commonly known as coolies, are living from hand to mouth and will therefore only be too glad to welcome any capitalist who would even put up a sweat shop to exploit them. ...

However, China must develop her industries by all means. Shall we follow the old path of western civilization? ... As a late comer, China can greatly profit in covering the space by following the direction already charted by western pioneers. Thus we can foresee that the final goal of the westward-ho in the Atlantic is not India but the New World. So is the case in the eco-

conomic ocean. The goal of material civilization is not private profit but public profit. And the shortest route to it is not competition but co-operation. In my International Development Scheme, I propose that the profits of this industrial development should go first to pay the interest and principal of foreign capital invested in it; second to give high wages to labor; and third to improve or extend the machinery of production. Besides these provisions the rest of the profit should go to the public in the form of reduced prices in all commodities and public services. Thus, all will enjoy, in the same degree, the fruits of modern civilization. This industrial development scheme which is roughly sketched in the above six programs is a part of my general plan for constructing a New China. In a nutshell, it is my idea to make capitalism create socialism in China so that these two economic forces of human evolution will work side by side in future civilization. (Sun, 1922, pp. 231-237)

## **6.24 Protection of sovereignty - conditions for sound protection**

As long as domestic industry is not protected, foreign regulations and legislation will rule our capital and industry (and accordingly our very lives), List claims,

The allegation of the school, that the system of protection occasions unjust and anti-economical encroachments by the power of the State against the employment of the capital and industry of private individuals, appears in the least favourable light if we consider that it is the foreign commercial regulations which allow such encroachments on our private industry to take place, and that only by the aid of the system of protection are we enabled to counteract those injurious operations of the foreign commercial policy.... If the English shut out our corn ... In these cases a direction is evidently given by foreign legislation to our capital and our personal productive powers ... those who nationally belong to foreign nations possess themselves the very same monopoly, and those who belong to us are merely thereby put on the same footing with them. (List, 1841a, p. 168)

List argues in a realistic manner, that any country had the right to protect itself by tariffs, and he praised Russia for setting up a system that actually was injurious to Germany. His advice to Germany was to follow the example of Russia,

... The most enlightened and discerning statesman of Russia, Count Nesselrode, ... declared in an official circular of 1821: 'Russia finds herself compelled by circumstances to take up an independent system of trade ...' ... It is foolish for Germans to try to make little of this progress and to complain of the injury which it has caused to the north-eastern provinces of Germany. Each nation, like each individual, has its own interests nearest at heart. Russia is not called upon to care for the welfare of Germany; Germany must care for Germany, and Russia for Russia. It would be much better, instead of complaining, instead of hoping and waiting and expecting the Messiah of a future free trade, to throw the cosmopolitan system into the fire and take a lesson from the example of Russia. (List, 1841a, pp. 92-93)

In the *Natural System* ..., List mentions seven conditions for sound protection for a nation that has started industrialisation. He focuses on protection from foreign disturbances and stimulation for investments, competition and expansion, while making sure that the needed resources are adequate,

For a state in the second or third phase of industrialisation there can be no doubt that it is both necessary and desirable to adopt the fiscal policy of protection.

The protection which a nation can give to its industries will be more effective if certain conditions are fulfilled:

1. The policy of protection should be in accord with the natural and human resources - as well as the social and political structure - of the nation.
2. The policy should aid not only manufacturers but also mining and agriculture.
3. The policy should ensure a steady expansion of industrial output.
4. The policy should safeguard industry and agriculture from fluctuations in trade and from slumps.
5. The policy should stimulate the competitive power of a country's industries. In time these industries should be able to face foreign competition successfully. The policy of protection should, however, continue to ensure the further expansion of the country's industries.
6. The policy of protection should be adjusted so that foreign capital and skill are attracted to a country.
7. The policy of protection should be so well balanced and should be established on so firm a basis that it cannot be harmed by any measures - legal or otherwise - taken (by foreigners) to oppose it. (List, 1837a, pp. 75-76)

## **6.25 Differentiate tariffs to stage of development**

List argues against protection of commodities and therefore of agriculture in the German situation, precisely as Ricardo and later Cobden argued for free trade of agriculture - and Adam Smith argued for free trade for manufacture, NB: in the British situation. List argues that tax and tariff policy protection should be adjusted according to the needs of the particular nation and the particular industry at the particular moment - and most of all with the future in mind! This is the practical core of his stage theory.

List argues that free trade in raw materials is beneficial at all levels of development; protection is only beneficial when it corresponds to a nation's stage of development; and any exaggeration of protection is harmful,

We have previously explained that free trade in agricultural products and raw materials is useful to all nations at all stages of their industrial development;...

According to our former deductions, protection is only beneficial to the prosperity of the nation so far as it corresponds with the degree of the nation's industrial development. Every exaggeration of protection is detrimental; nations can only obtain a perfect manufacturing power by degrees. (List, 1841a, p. 324)

It is evident that he did at least have some basic notion of a stage theory already around 1820 (Cf. his *Vienna Memorandum* to Prince Metternich, List, 1820, p.539). List nevertheless says that he developed his stage theory after his American Experience,

It was here, that it first became clear to me, how the economy develops step by step. (List, 1827b, 161)

Following Hegel's view of history as a succession of stages, List details three stages of development, thereby going from a barbarous state via a developing state to a civilised industrial state, and advises respectively a policy of free trade, restrictive trade and back to free trade, all in order to reach the goal of industrialisation.

According to List's theory of economic development stages, any country wishing to industrialise would have to go through the mentioned three stages; 1) a period of free trade with export of commodities and gradual introduction of industry; followed by 2) a period of moderate protective trade policy and navigation laws, in conjunction with development of infrastructure. Finally, there would be 3) a return to free trade when all important economic branches had been developed.

List summarises his stage theory such, and points out that history teaches us that nations must "modify their systems according to the measure of their own progress", and that only Great Britain has yet reached the final stage of development,

Finally, history teaches us how nations which have been endowed by Nature with all resources which are requisite for the attainment of the highest grade of wealth and power, may and must -- without on that account forfeiting the end in view -- modify their systems according to the measure of their own progress: in the first stage, adopting free trade with more advanced nations as a means of raising themselves from a state of barbarism, and of making advances in agriculture; in the second stage, promoting the growth of manufactures, fisheries, navigation, and foreign trade by means of commercial restrictions; and in the last stage, after reaching the highest degree of wealth and power, by gradually reverting to the principle of free trade and of unrestricted competition in the home as well as in foreign markets, that so their agriculturists, manufacturers, and merchants may be preserved from indolence, and stimulated to retain the supremacy which they have acquired. In the first stage, we see Spain, Portugal, and the Kingdom of Naples; in the second, Germany and the United States of North America; France apparently stands close upon the boundary line of the last stage; but Great Britain alone at the present time has actually reached it. (List, 1841a, p. 115)



List writes, that the regulatory procedure that agrees with the normal stages of development, is to go from free trade via protection to free trade. The less developed, the more a nation will benefit from free trade; and the more thoroughly developed the greater the disadvantages from free competition with more developed nations. The core reason in principle is that the 'barbarous nation' has no mental capital to loose, and thus can only gain from intercourse with more advanced nations. The less developed nation, however, has attained 'a higher level' of mental capital that it risks to loose in competition with the stronger, and thus it must protect. List again points out what history teaches us,

The industrial history of nations, and of none more clearly than that of England, proves that the transition from the savage state to the pastoral one, from the pastoral to the agricultural, and from agriculture to the first beginnings in manufacture and navigation, is effected most speedily and advantageously by means of free commerce with further advanced towns and countries, but that a perfectly developed manufacturing industry, an important mercantile marine, and foreign trade on a really large scale, can only be attained by means of the interposition of the power of the State.

The less any nation's agriculture has been perfected, and the more its foreign trade is in want of opportunities of exchanging the excess of native agricultural products and raw materials for foreign manufactured goods, the deeper that the nation is still sunk in barbarism and fitted only for an absolute monarchical form of government and legislation, the more will free trade (i.e. the exportation of agricultural products and the importation of manufactured goods) promote its prosperity and civilisation.

On the other hand, the more that the agriculture of a nation, its industries, and its social, political, and municipal conditions, are thoroughly developed, the less advantage will it be able to derive for the improvement of its social conditions, from the exchange of native agricultural products and raw materials for foreign manufactured goods, and the greater disadvantages will it experience from the successful competition of a foreign manufacturing power superior to its own. (List, 1841a, ch. 15, pp. 177-178)

List continues by arguing that only able nations that are threatened with established competition should engage in commercial restrictions, tariffs should be moderate and not fully exclude foreign competition; tariffs should be changed only gradually, and only last for a limited period of time,

Solely in nations of the latter kind, namely, those which possess all the necessary mental and material conditions and means for establishing a manufacturing power of their own, and of thereby attaining the highest degree of civilisation, and development of material prosperity and political power, but which are retarded in their progress by the competition of a foreign manufacturing power which is already farther advanced than their own -- only in such nations are commercial restrictions justifiable for the purpose of establishing and protecting their own manufacturing power; and even in them it is justifiable only until that manufacturing power is strong enough no longer to have any reason to fear foreign competition, and

thenceforth only so far as may be necessary for protecting the inland manufacturing power in its very roots.

The system of protection would not merely be contrary to the principles of cosmopolitical economy, but also to the rightly understood advantage of the nation itself, were it to exclude foreign competition at once and altogether, and thus isolate from other nations the nation which is thus protected. If the manufacturing power to be protected be still in the first period of its development, the protective duties must be very moderate, they must only rise gradually with the increase of the mental and material capital, of the technical abilities and spirit of enterprise of the nation. (List, 1841a, ch. 15, pp. 178-179)

List says that although free trade with industrialised nations is the best policy for a transition from a lower stage to a higher stage, unfortunately some advanced nations in short-sighted self-interest sabotage the progress of other nations in order to obtain a monopoly in manufacturing. Therefore, a system of protection - a tariff system - has to be implemented by late-coming nations that try to catch up,

Every nation, which attaches any value to its independence and continued existence, must strive to pass with all speed from a lower stage of culture to a higher, and to combine within its own territory agriculture, manufactures, shipping, and commerce. The transition from savagery to the pastoral state, and from the latter to the agricultural state, are best effected by free trade with civilized, that is, manufacturing and commercial nations. The transition from an agricultural community into the class of agricultural, commercial, and manufacturing nations could only take place under free trade if the same process of development occurred simultaneously in all nations destined to manufactures, if nations put no hindrance in the way of one another's economic development, if they did not check one another's progress through war and tariffs. But since individual nations, through specially favourable circumstances, gained an advantage over others in manufactures, trade, and shipping, and since they early understood the best means of getting and maintaining through these advantages political ascendancy, they have accordingly invented a policy which aimed, and still aims, at obtaining a monopoly in manufactures and trade, and at checking the progress of less advanced nations. The combination of the details of this policy (prohibition of imports, import duties, restrictions on shipping, bounties on exports) is known as the tariff system. (List, 1841b, *Introduction*, in Hirst, 1909, pp. 304-305)

## **6.26 Differentiate tariffs to national circumstances**

List's pragmatic attitude towards regulation of trade was and is perhaps more normal in practice than we might think nowadays, and contrary to theoretical economic doctrines of free trade.

List criticised "excessive" protection that did not confirm to the promoting principles of awaking and sharpening the productive powers of the nation, but instead stupefied and blunted them. He also criticised protection of the wrong products (with little content of skill) or at the

wrong moment (Cf. List, 1841a, pp. 309-311) and was almost hostile to bounties.

Protection can be afforded, either by the prohibition of certain manufactured articles, or by rates of duty which amount wholly, or at least partly, to prohibition, or by moderate import duties. None of these kinds of protection are invariably beneficial or invariably objectionable; and it depends on the special circumstances of the nation and on the condition of its industry which of these is the right one to be applied to it. (List, 1841a, pp. 309)

List's theory of tariffs emerged from his historical understanding of how policy had to be adjusted according to the factual circumstances of the nation in question. One clear indication of this is his description of French economic history,

... Every nation must follow its own course in developing its productive powers; or, in other words, every nation has its particular Political Economy. (List, 1827b, p. 75)

In regard to the expediency of protecting measures, I observe that it depends entirely on the condition of a nation whether they are efficacious or not. (List, 1827b, p. 33)

A hero of List in the early history of economics as a science, in addition to the French statesman Jean Baptiste Colbert, was the Italian economist Antonio Serra. Serra comments that the same economic policy has different results in different circumstances. He metaphorically comments that the sun melts butter but makes clays hard (Cf. List, 1841a, p. 333; Serra, 1613). Concerning Colbert's efforts to transform France, List comments that,

Both France and England adopted a policy of protection but they did so under very different circumstances... So we see that the same fiscal system made England prosperous but left France backward. (List, 1837a, p. 145)

For the record, List here blamed this French failure not on Colbert, but on the self-serving and shortsighted establishment, king, aristocracy and clergy.

## **6.27 Differentiate tariffs to suitable time**

List argues that different countries need different tariff arrangements at different times. Tariffs ought to be, so to say, "bell shaped" along the time axis. First tariffs ought to be low, when there was no industry in the concerned branch to protect, then as there emerged something to protect tariffs ought to rise, and as industry would grow, competitive tariffs should be lowered. This "stage theory" of tariffs and taxation is discussed thoroughly in his *Natural System* ... (Cf. List, 1837a, chapter

2: *National Economics*, pp. 30 ff). One reason why tariffs should first be moderate; then raised and finally lowered again - is that this will lower the distress to consumers. Furthermore, high tariffs will not produce high revenues and foreigners should be allowed a fair share of a market,

The best policy would be to start with moderate duties and to raise them by a predetermined sliding scale until they are high enough to assure the industry of a dominant position in the home market. On each occasion that the import duty is raised there will be an equivalent increase in the competition between manufacturers so that the price of the manufactured goods will progressively decline. When this happens the consumers will have no cause to complain of the import duties. As we explained in chapter 16 the expansion of a country's industrial power is accompanied by an improvement in the standard of living of its citizens. As soon as manufacturers have secured a dominant position in the home market, the import duty can be reduced on a sliding scale so that competition from foreign factories is gradually allowed. This competition, however, should be permitted to exist to only a limited extent. The appearance of foreign goods will stimulate competition between rival firms at home. Foreigners should be allowed no more than a fair share of the annual expansion in the demand for manufactured goods. Every nation which enjoys a harmonious balance between industry and agriculture enjoys also an annual increase in population and production, which automatically increases the demand for manufactured goods every year. (List, 1837a, p. 115)

A minister of state should have the authority to change tariffs overnight in case of sudden events like a commercial crisis,

But if, for any reason, circumstances change, a government should reverse its policy. Suppose that foreigners succeeded in gaining more than their fair share of the increased demand. Suppose that they were actually able to supply all the increased demand and threatened to restore the situation that existed before the imposition of the tariff. This might happen because, for some reason, foreign manufacturers enjoyed a temporary advantage over home producers. Owing to a trade recession, for example, they might decide to get rid of their surplus goods at any price. If this happened the government should promptly restore higher import duties until the former position was re-established. A minister of state should be empowered to do this without waiting for the next meeting of the legislature. (List, 1837a, pp. 115-116)

## **6.28 Differentiate tariffs to branch of production**

List argues for special protection only of the most important branches. Moreover, regarding differentiated protection of these special branches, List as usual urged the necessity of using English tariff policy as a model to be copied,

The island kingdom borrowed from every country of the Continent its skill in special branches of industry, and planted them on English soil, under the protection of her customs system. (List, 1841a, p. 177)<sup>421</sup>

Furthermore, List argues that the less important branches will rise up around these under less protection. He lists a number of criteria for various degrees of 'importance', such as the involvement of capital, machinery, skill, necessities and employment,

Neither is it at all necessary that all branches of industry should be protected in the same degree. Only the most important branches require special protection, for the working of which much outlay of capital in building and management, much machinery, and therefore much technical knowledge, skill, and experience, and many workmen are required, and whose products belong to the category of the first necessities of life, and consequently are of the greatest importance as regards their total value as well as regards national independence (as, for example, cotton, woollen and linen manufactories, &c.). If these main branches are suitably protected and developed, all other less important branches of manufacture will rise up around them under a less degree of protection. It will be to the advantage of nations in which wages are high, .... to give less protection to manufactures in which machinery does not play an important part, than to those in which machinery does the greater part of the work,... (List, 1841a, p. 179)

Manufacturing is of particular concern of List, since they were knowledge- and energy intensive: They give opportunities for employment of machines; for productive mechanisation, and as such, they are effective in lifting the productivity of labour. They also promote a division of labour far greater than agriculture and thereby; and on the other hand, manufactures also would give greater opportunities for a more complete and corresponding confederation of labour; being more complete; -complex; and -rewarding:

The result of this greater confederation was that a far greater variety of skills could be developed and further specialised, through employment of science, knowledge, so as to create more forceful productive synergies.

Knowledge intensive activities were the economic activities to be protected more than any other activity, since these activities had most to give at a later stage through lifting the productive potential of the economy. Knowledge-intensive activities were also the most vulnerable since they were more difficult to foster and maintain. Accordingly, they had to be cultivated and protected, with the most careful attention.

List's advice is not to encourage the development of all branches at the same time, but to concentrate on those branches with a large home market and potential for success,

---

<sup>421</sup> A more extensive quote may be found in the section above, *Education tariff – the English model*.

There are many ways in which tariffs can encourage the development of industries. Countries with different material and human resources and different economies will require different tariffs. ...

No country should try to promote the immediate expansion of all branches of manufacture. At first - for the reasons that we have mentioned - it should attempt to stimulate only those industries which have an assured home market and appear to have the best chance of success.

Even these industries should not at first be protected by high import duties. Such duties would not increase the revenues of the state and would be oppressive as far as consumers are concerned. (List, 1837a, p. 115)

List thereby advises to single out branches of special importance for other branches, and furthermore to pick among those, branches with a high domestic demand and success ratio.

Interestingly, List claims that the best strategy for contemporary key industries like coal and iron is actually not tariffs, but rather to improve internal communications - and if capital is in want the State should invest in companies. This is particularly so too with machine producing industry, where the State could set up model companies.

Pig iron and coal are imports of considerable significance. It is desirable to consider very carefully if the natural resources of a country favour the opening up of coalmines or the establishment of ironworks. If conditions are unfavourable there is no point in levying import duties on coal or pig iron. The country should facilitate the importation of coal and pig iron since they are materials which are indispensable to the expansion of the economy.

But if the necessary natural resources are available, import duties should be imposed upon coal and pig iron, though they should not be so high as to reduce consumption. The best policy would be for the state to foster these industries by improving internal communications - canals and railways - as much as possible. And if there is not enough private capital available for the development of the mining industry the state should itself invest in joint stock mining companies and it should forego any dividend on its shares so long as private investors are not receiving any interest on their capital. (List, 1837a, pp. 116-117)

Whilst there would be differentiated protection, limited by time and branch, from external competition, there would be no internal barriers to trade. In this way national production and trade was made efficient by internal competition - a classic Mercantilist strategy of unification.<sup>422</sup>

## **6.29 Pragmatism - focus on potential and value added**

The core organiser of List's stage strategy of development was to be the legal system, mainly using incentives and trade restrictions. List's strategy is pragmatic and he repeatedly advises to adapt tariffs to the local circumstances, and he advises specifically to pay attention to the

---

<sup>422</sup> Cf. the section below, *Mercantilism promoted competition and efficiency*.

levels of wages and prices of the branch in question, to see whether there is a potential competitive edge.

Furthermore, one must focus on whether domestic potentials exist or not, regarding requisite skills, capital and raw materials for domestic production. - And the higher the value added, the more important the branch is, "The more that is done .. the greater .. the protection."

The principle that we have suggested for levying import duties on textiles should be reversed for iron goods. The less work that is done on iron goods in the manufacturing process the lower should be the duty levied on imports. The more that is done in the manufacturing process the greater should be the protection afforded to such products. Iron is a raw material that influences all the productive powers of a country. The less the work put into the manufacture of iron products the more damaging and dangerous are the consequences of making them more expensive. (List, 1837a, p. 117)

List pragmatically argues that when in short supply, the machine tool industry is a possible exception to protective duties. This is due to its importance for other industries. In addition, when capital is in shortage, the state should invest in vital industries (Cf. List, 1837a, p. 117)<sup>423</sup>

Furthermore, when considering the level of tariff rates of it is important to take into consideration the level of prices and wages, and the availability of raw materials, capital and efficient communications,

In general it may be observed that in fixing the rates of import duties to protect home industries it is important for a government to consider the level of prices and wages as well as the availability of capital and raw materials. The government should also assess the efficiency of the communications between its own country and the foreign countries with which it trades and with which it may have to compete. (List, 1837a, p. 117)

Therefore the USA should not protect low-wage and labour-intensive industries (as long as there is alternative employment). The US should rather import such products, since this would stimulate production of other goods for export. In other words, one should 'economise' with resources,

A country such as the United States which has had a high level of wages for a long time should not attempt to protect industries, such as the manufacture of silks, which rely upon artistic patterns and upon operatives who have considerable skill but are prepared to work for moderate wages. The success of the silk industry depends upon skills handed on from one generation of workers to the next. The United States should not protect a silk industry of its own so long as it can import silks in exchange for some of its own products. If an import duty were levied on silks it should be regarded as a revenue duty on the rich. Large imports of silks will not harm the productive

---

<sup>423</sup> See quotation in the section *Production of energy and machines*, in chapter 4.

powers of the nation. Indeed they will stimulate the production of the goods which are exported in exchange for silks. (List, 1837a, p. 116)

### **6.30 Fiscal income has last priority in tariff policy**

The period in which List was active (1811- 1846), had a poorly developed system of economic regulation in comparison to modern systems almost 200 years later. The easiest or sometimes even the only way to regulate in List's time was mainly through the crude means of prohibition and tariffs. This is why the same strategy today would suit the developing countries best, with their relatively speaking poorly developed regulatory structure and infrastructure. More industrially developed countries, on the other hand, potentially have many more financial regulatory instruments available, which can be relatively fine-tuned. Many of these instruments are not being used today because of free-trade treaties, customs unions - and for reasons of ideology.

Fiscally, when starting a phase of industrialisation, this would imply an immediate rise of revenue from tariffs when domestic production was still small. Later this source of revenue would decline, as tax revenue from domestic production would grow and this type of imports would fall. The initial rise would secure a basis for potential public spending on infrastructure or subsidies for other domestic public goods production. The later rise in tax-revenues from domestic production would secure a domestic basis for new revenue-producing projects to be launched. However, List argues,

To raise money for the state should be only a secondary object of a tariff. Again import duties should not be levied in the hope of enticing specie into the country - and of keeping it there. This is a discredited aspect of the mercantile system. Such a policy would weaken rather than strengthen the country's productive power.

Import duties should be levied to protect and gradually to increase the nation's productive power. With this in mind the rates of duties levied under a tariff should be adapted to the needs of a particular country. (List, 1837a, p. 36)

List seems here to have forgotten that in 1827 he claims that stability; steadiness is the general rule of running a brach and therefore the primary object of tariffs (Cf. List, 1827b, p. 111). In his *Natural System* in 1837, List made the point that,

The object of a tariff is to frustrate any hostile action by foreigners to harm a country's economy ... (List, 1837a, p. 33)

Moreover, in his *National System*, chapter 24 made the point of *Manufacturing power and the principle of stability and continuity of work* (List, 1841a, p. 294). This rather makes fiscal income the third object of



a tariff policy, not the second as he claims here. In any case, fiscal income is not a first priority when determining tariff policy.

### **6.31 Differentiate tariffs - according to ranking order**

List thoroughly elaborated a system of differentiating and temporary protective tariffs.<sup>424</sup> List recommends several ranking orders for a sound economy policy, concerning ultimate goals,<sup>425</sup> concerning political instruments in general, concerning capital, concerning branches, and concerning taxation and tariffs.

The ultimate goal is perfection and progress of freedom, moral standards and civilisation. Material wealth is a tool in this quest.

List describes a ranking order for political tools, where positive incentives rank top and prohibitions rank lowest, since freedom is a key motivator in modern society, and of dear value to List and the German tradition of thought that he follows.

List prescribes a ranking order for capital; where mental capital is both more fragile and more important than physical capital. The latter may always be recreated by the former, but not vice versa.

Differentiated policies are advised to accommodate a ranking order for different branches, where some are considered as being the precondition and foundation for other branches.

List's order of priorities for taxation seems to be Stability; incentives; and revenue, or put slightly differently; stability, "education", and income.

Protect for:

- 1) Stability of home markets and banks
- 2) Education of mental capital
- 3) Fiscal income

This is the ranking order of more intermediate goals, which an economy should strive for and use as beacons in the global storm. First of all the preservation of mental and physical capital must be protected; then it should be expanded and improved; and finally it must be financed. Revenue is the least important consideration, since stability and incentives are the precondition for public revenue, and since many actions to improve stability and incentives are regulative measures that do not cost much. Furthermore, taxation ought to affect the productive power of the working class positively, e.g. by making absolute necessities less expensive.

---

<sup>424</sup> A small index of where he treated various policies may be found in appendix 2.

<sup>425</sup> A small table of the logic of List's system may be found in appendix 1.

### 6.32 National monopolies are tools for the public good

As mentioned above, List's protectionist taxation-arrangements were designed to incite willingness to invest in production and commerce. Such protection offers no eternal privilege to any individual: For List, protection should convey temporary privileges to all who are willing to risk a portion of their life (i.e. time to acquire skill or capital) for the public good. Protection must be limited to the period during which it serves public interest the most, e.g. the time it takes to build national know-how. Property rights to monopolies - and similarly customs agreements and other fiscal measures - are therefore short-term tools, which authorities pragmatically regulate for the long-term public good.

List discusses the issue of monopolies rather thoroughly in his *Natural System*, in ch. 15 entitled, *Does the Protection of Industry by a Tariff give Manufacturers a Monopoly prejudicial to the Consumers of the Goods they make?*, (Cf. List, 1841a, pp. 174 ff)

List critically comments merchants' negative attitude to monopolies (unless it favours them, he ironically argues elsewhere). He argues that the privilege of protection is enjoyed by the whole nation, at the expense of other nations,

Merchants produce nothing. They make a living by buying and selling goods. It is in their interest to denounce any measure that hampers the freedom to buy and sell. Merchants have condemned as a "monopoly" any system of protection that is introduced in a country to safeguard the home market in manufactured goods for citizens of that country. ...

The policy of protection confers no privilege on one citizen at the expense of another. The privilege is one enjoyed by a whole nation at the expense of another. (List, 1837a, p. 81)

List claims the criticism from merchants; that tariffs would create monopolies, to be somewhat faulty, since foreigners (in List's time) enjoy international monopolies, which this protection is designed to dissolve - by establishing domestic production. Tariffs would place national production on the "same footing" with foreign production, as List phrases it - or 'levelling the playing field' as we might put it today. Furthermore, the domestic privilege will be held in check by domestic competition, it will be repaid and the consumers will enjoy it,

If the school maintains that protective duties secure to the home manufacturers a monopoly to the disadvantage of the home consumers, in so doing it makes use of a weak argument. For as every individual in the nation is free to share in the profits of the home market which is thus secured to native industry, this is in no respect a private monopoly, but a privilege, secured to all those who belong to our nation, as against those who nationally belong to foreign nations, and which is the more righteous and just inasmuch as those who nationally belong to foreign nations possess themselves the very same monopoly, and those who belong to us are merely thereby put on the same footing with them. It is neither a privilege to the exclusive

advantage of the producers, nor to the exclusive disadvantage of the consumers; for if the producers at first obtain higher prices, they run great risks, and have to contend against those considerable losses and sacrifices which are always connected with all beginnings in manufacturing industry. But the consumers have ample security that these extraordinary profits shall not reach unreasonable limits, or become perpetual, by means of the competition at home which follows later on, and which, as a rule, always lowers prices further than the level at which they had steadily ranged under the free competition of the foreigner. If the agriculturists, who are the most important consumers to the manufacturers, must also pay higher prices, this disadvantage will be amply repaid to them by increased demands for agricultural products, and by increased prices obtained for the latter. (List, 1841a, ch. 14, p. 169)

List claims that depending on the circumstances, there are therefore both good and bad monopolies. Bad national monopolies raise domestic prices permanently, whereas good national monopolies lower them in the longer term, e.g. by counteracting a foreign monopoly,

There are useful monopolies as well as harmful and unjust monopolies. Thus a useful and just monopoly is one granted to an inventor who enjoys the exclusive use of his discovery for a definite period of time. ...

The granting of exclusive privileges in the home market to industrialists is open to criticism only if those privileges cause manufactured goods to be always sold at a higher price than similar goods made abroad. (List, 1837a, p. 81)

### **6.33 Protect against monopolisation**

The natural quest for monopoly and tendency to eliminate competition justifies protection, according to List. He describes how competition, which inside an economy serves to make it more efficient, can be a disaster when it comes from abroad. Dumping used by the strongest competitor is but one tool in the quest for international monopoly, which may wreck national industry,

By free competition it is often hoped to oblige the competitor to discontinue work which has compelled the manufacturer or merchant to sell his products under their legitimate price and often at an actual loss. The object is not merely to prevent the interruption of our own industry, but also to force others to discontinue theirs in the hope later on of being able by better prices to recoup the losses which have been suffered.

In any case striving after monopoly forms part of the very nature of manufacturing industry. This circumstance tends to justify and not to discredit a protective policy; for this striving, when restricted in its operation to the home market, tends to promote cheaper prices and improvements in the art of production, and thus increases the national prosperity; while the same thing, in case it presses from without with overwhelming force on the internal industry, will occasion the interruption of work and downfall of the internal national industry. (List, 1841a, p. 297)

In the long run, the effect of no protection and decreased international competition is therefore more expensive products. Protection may therefore be seen as a remedy to correct market imperfections where some actors have the upper hand. This was indeed, List's opinion, concerning the strong position of English producers in his day. List was not at all to become a loner in this line of argument, as his arguments were to be backed even by orthodox English economists,

This is the argument which was developed in theory by Henry Sidgwick to show that ultimately the world at large might gain by the temporary protection of the constituent nations. And on the practical side it is this argument which is most popular in the British colonies. (Nicholson, 1885, in his 'Introductory Essay' to the translation of List's *National System*)

The utilitarian Henry Sidgwick was allegedly described by Alfred Marshall, founder of the Cambridge School of economics, as his "spiritual mother and father." In his *Principles of Political Economy*, Sidgwick in great details lays out the argument that the protectionists are right, when the tariff issue is seen in economic terms and with a broader geographical view,

What Free Traders usually urge against this as a practical conclusion is that experience shows that such a duty when once imposed is not likely to be taken off, — that the protection designed to be temporary will practically become permanent. And I admit fully the force of this appeal to experience: but the consideration thus adduced does not strictly belong to economic theory: it is a political argument, the use of which tacitly concedes the economic correctness of the protectionists' reasoning. ...

§ 3. It will be seen that the argument for temporary protection, — in both the cases above stated, — is theoretically valid from what I have called a "cosmopolitan" point of view; — that is, if we consider the interests of the two districts taken together, and not merely that of the district whose industry is protected. (Sidgwick, 1883, Book V, pp. 492-493ff)

### **6.34 Customs unions counteract monopolies and inefficiency**

Nevertheless, whilst arguing for potential benefits from temporary national monopolies, List repeatedly also claims that protection might be damaging in a small nation, as it is likely to establish an inefficient monopoly,

A small state can never bring to complete perfection within its territory the various branches of production. In it all protection becomes mere private monopoly. Only through alliances with more powerful nations, by partly sacrificing the advantages of nationality, and by excessive energy, can it maintain with difficulty its independence. . (List, 1841a, p. 175)

Various measures could counter the danger of creating monopolies, such as making sure a market had several producers, for instance by making sure the market was large enough - by merging local markets and expanding markets through better transport and -communication. Furthermore, protection intended to support the creation of multiple domestic producers, would thereby establish internal competition, as opposed to a monopoly of the foreign powers.

Small nations therefore would have to co-operate through customs unions arranged by means of international conferences and legal agreements. List therefore advised nations to join into customs unions, for reasons of efficiency, and expressly preferred this to older methods like conquest and annexation,

In modern times a fourth means has been adopted, which leads to this object in a manner much more in accordance with justice and with the prosperity of nations than conquest, and which is not so dependent on accidents as hereditary succession, namely, the union of the interests of various States by means of free conventions. (List, 1841a, p. 176)

### **6.35 Transportation and urbanisation promotes competition**

To List, urbanisation was the direct result of two socio-technical phenomena, centralisation and improved transport. List did not especially approve of centralisation as such, except as a tool for other worthwhile purposes, so his advice - in order to promote (virtual) urbanisation - was to improve transport, or in today's language, improve communications. The effect of improved transport was to lessen the effective (sic!) distances, moneywise and time wise, thereby effecting a virtual centralisation.

Urbanisation was therefore to be realised by technological, economic and political integration. This was to be realised through political activity and through innovations and investments into activities related to transport (communications) first of all, but also investments into industry and agriculture. In particular the combination of innovation and transport (communications) would be not only doubly efficient but would treble efficiency, in that improved innovative communications would increase innovation even further, by bringing separate minds and markets closer together. All in a positive feedback loop. Improved transportation would thus bring about improved culture and wealth.<sup>426</sup>

---

<sup>426</sup> Cf. also the sections in chapter 4: *Mental side of transportation; Urbanisation furthers communication, innovation and freedom; Communication furthers urbanisation; wealth and culture; and Communication furthers innovation - and vice versa.*

List interestingly claims that the best strategy for the promotion of key industries is not tariffs, but improvement of internal communications. (Cf. List, 1837a, pp. 116-117)<sup>427</sup>

A core tool of List was to counteract monopolisation by promoting more efficient transportation, for the simple reason that the reduction of effective distance that more efficient transport allows for creates larger markets and thereby also allows greater competition. This enlargement of markets may be seen as virtual urbanisation, making a nation imitate the population density of cities. The effect of increased competition may be observed in the geographical equalisation of prices. This was in the tradition of State Mercantilism's promotion of infrastructure, read large.

### **6.36 Mercantilism promoted competition, efficiency- and profitability**

A classic Mercantilist strategy of unification was to improve national efficiency - production and trade - by increasing internal competition. Although, there would be differentiated protection from external competition, there would be no internal barriers to trade and improved transportation and standards of measurement, law and trade. Thus, Gustav Schmoller writes that Mercantilism at the core was a unifying system, using public finance to forge the forces of policy and economy into one strong tool, as opposed to the fragmented and localised feudal system,

What, to each in its time, gave riches and superiority first to Milan, Venice, Florence, and Genoa; then, later, to Spain and Portugal; and now to Holland, France, and England, and, to some extent, to Denmark and Sweden, was a state policy in economic matters, as superior to the territorial as that had been to the municipal. ... the state organisation assisted the national economy and this the state policy; and, quite unlike earlier times too, public finance served as the bond of union between political and economic life. It was not only a question of state armies, fleets, and civil services; it was a question rather of unifying systems of finance and economy ... (Schmoller, 1884)

In Eli Hecksher's book *Mercantilism*, the first volume has the title *Mercantilism as a Unifying System*. In the second volume and the chapter *Mercantilism force freer trade upon towns and provinces within the national boundaries*, he writes that Mercantilism was a liberating force - inside national boundaries - since it,

... opposed everything that bound down economic life to a particular place and obstructed trade within the boundaries of the State. (Hecksher, 1935, Vol. II, p. 273)

---

<sup>427</sup> See quotation in the section above, *Differentiate tariffs to branch of production*

Polanyi quotes Hecksher such,

“Competition was often artificially fostered (nationally)...in order to organise markets with automatic regulation of supply and demand.” (Heckscher). The first modern author to recognize the liberalizing tendency of the mercantile system was Schmoller (1884). (Polanyi, 1957, p. 278, from Hecksher, Vol. II, 1935)

### 6.37 Balance of payments, once again

Trade- and payment deficits and trade protection are not out-dated issues. As List would have argued that as long as the world is divided into different political entities with different currencies and monetary arrangements, they will remain important practical issues. Milton Friedman<sup>428</sup> provides one example. In 1988, Friedman writes an article in the WSJ, *Why the Twin Deficits are a Blessing*, using an argument seemingly in the Adam Smith tradition (Friedman, 1988). More specifically, Friedman argues that the trade- and payments deficits were unimportant scarecrows, in relation to the real problem of excessive taxation and regulation,

The media and the public have been sold a bill of goods. They have become convinced that the so-called twin deficits—the federal budget deficit and the foreign trade deficit—are time bombs that will sooner or later undermine our prosperity and prospects for growth. Nothing could be farther from the truth. <sup>429</sup> (Friedman, 1988, Wall Street Journal)

---

<sup>428</sup> Milton Friedman was a Nobel Laureate receiver (1976), and “founder” of the neo-classical ‘Chicago School’ and ‘monetary economics’ (as opposed to ‘Keynesianism’ and ‘neo-Keynesianism’), comprising a whole series of Nobel Laureate receivers in the “Rational Expectations” tradition (out of 26 ‘Chicago Laureate’ alumni in economics); George J. Stigler (1982); Merton Miller, Harry Markowitz, and William Sharpe (1990); Ronald H. Coase (1991); Gary S. Becker (1992); Robert Fogel and Douglass C. North (1993) and Myron Scholes (1997).

<sup>429</sup> Friedman continues: “True, budget deficits and foreign-trade deficits can be disastrous under some circumstances—witness Brazil, Argentina, Mexico, or Chile under Allende. But they can also be beneficial under other circumstances. And I submit that those “other circumstances” prevail in the U.S. today, and have prevailed for some years. ... Do you really believe that the liberal Democrats who told the country for decades that deficits were an effective tool for stimulating and stabilizing the economy have seen the light and become born-again budget balancers? ...

They are rattling the scarecrow of deficits to frighten the public—and not least, the president—into accepting higher taxes. But higher taxes will not eliminate the deficit. ...

The capital inflow that is the other side of the current-account deficit has enabled productive investment in the U.S. to be higher than the amount U.S. residents were willing to finance. It has thereby contributed to a higher national output and a more rapid rate of growth. That is precisely how the U.S. managed to grow so rapidly in the 19th century—by financing investment with

Friedman argues that the debt burden (in 1988) is on par with earlier decades, or lower. Furthermore, the balance of payments deficit is a positive sign of increased future wealth, since it was a result of sound capital inflows, higher foreign investment in the US after the implementation of Reaganomics. On the other hand Friedman argues that the public deficit is a result of unsound governance; being excessive and ineffective public spending.

One may object to Friedman's argument that capital inflow may not lead to higher real investment, but instead to e.g. asset inflation, which has several detrimental effects to the productive forces of a nation.<sup>430</sup> Furthermore, today, the situation has changed - after decades of increased and inefficient public spending (as Friedman warned against), but combined with decreased investments as opposed to the situation (which Friedman viewed favourably).

Illustrating the resulting and increased indebtedness of the USA and her lack of ability to pay for herself, in 2011 Bill Gross of Pimco,<sup>431</sup> explained that he had dumped US bonds due to the immense US public indebtedness, estimated at 500 % of GDP. Gross argues, in line with Friedman (1988) above, that even without expenditures to agriculture, housing, defence, and infrastructure read large, the US deficit is still enormous - due to entitlements, and unless this is fundamentally addressed soon the USA will default,

Without attacking entitlements – Medicare, Medicaid and Social Security – we are smelling \$1 trillion deficits as far as the nose can sniff. Once dominated by defense spending, these three categories now account for 44% of total Federal spending and are steadily rising. ... after defense and interest payments on the national debt are excluded, remaining discretionary expenses for education, infrastructure, agriculture and housing constitute at most 25% of the 2011 fiscal year federal spending budget of \$4 trillion. You could eliminate it all and still wind up with a deficit of nearly \$700 billion!

---

funds from Britain and elsewhere. It was a good deal for the foreign investors – but also for the U.S.

Let us put aside the scarecrows of the twin deficits and face up to the real problems that threaten U.S. growth and prosperity: excessive and wasteful government spending and taxing, including in particular the real time bomb in Social Security, Medicare and Medicaid programs; concealed taxes in the form of mandated expenditures on private business; excessive and misguided regulation of individuals as well as businesses; the changes in tort legislation that are discouraging innovation; and not least, the recent increase in protectionism and the threat of a further major increase. We should and can do something about these problems, not allow ourselves to be diverted by politically convenient scarecrows.” (Friedman, 1988, Wall Street Journal)

<sup>430</sup> A similar forgetfulness (of financial investments resulting in asset inflation) appears when economists assume that saving equals (real) investment.

<sup>431</sup> I.e. the CEO of Pimco, 'Pacific Investment Management Co', headquartered in Newport Beach, California, USA; the world's biggest bond investor; owned by Allianz SE, Germany.



So come on you stinkers; enough of the Pepé Le Pew romance and promises. Entitlement spending is where the money is and you need to reform it.

...

... the only way out of the dilemma, absent very large entitlement cuts, is to default in one (or a combination) of four ways ... (Gross, 2011, April Outlook) <sup>432</sup>

One problem for the USA is a degression into low productivity per capita, as outsourcing has left US industry starved of investments. Another problem is a lack of quality Labour. The desire to deal with these problems, have led to a slow but increasing revival of interest in historical parallels and e.g. the writings of Friedrich List.

On the other hand, and in the practical financial world, other economists went back to the ideas of List, claiming that deficits did matter. Late in 2004, a Managing Director of US based PIMCO<sup>433</sup>, Chris P. Dialynas, writes a highly profiled article on PIMCO's web pages, *Trouble Ahead - Trouble Behind, Restructuring the Global Economy - A New Marshall Plan*, on the prospects due to global trade imbalances. In chapter 5a) Dialynas writes,

## V. How Did Global Imbalances Arise? A Tale of Two Fallacies

### A. Friedrich List and the Free Trade Illusion

...

List's ideas are of great importance today. The global trade imbalances and wealth transfers that concerned List are most prevalent today. ... Today's global trade imbalances are a manifestation of a competitive struggle for markets by "particular economies" in a time of war. (Dialynas, 2004, ch. 5A, see a larger extract in appendix 2)

This article was much noticed and commented, and was placed on top by *Reuter* in their review of the financial experts' forecasts for 2005. Dialynas writes about the situation that the USA faces today, when so much of its former industry has either outsourced to the cheap-labour countries or been outcompeted by them due to a US combination of higher wages (including pension claims etc.), deteriorating infrastructure and skills. In essence, Dialynas writes about a situation where the

---

<sup>432</sup> Wall Street Journal writes, "In addition to the \$9.1 trillion in federal debt seen on the books, Gross is worried about the hefty portion of each year's budget that goes toward non-discretionary and entitlement spending. Including obligations for Medicare, Medicaid and Social Security, the "true but unrecorded" U.S. debt is \$75 trillion, Gross said, which amounts to near 500% of gross domestic product. ...

"Unless entitlements are substantially reformed, I am confident that this country will default on its debt; not in conventional ways, but by picking the pocket of savers," Gross said, pointing to inflation, currency devaluation and low to negative real interest rates as the "stealth" forms of default--all of which are detrimental to Treasury holders. " (Lin, 2011)

<sup>433</sup>I.e. *Pacific Investment Management Co.*, the world's largest bond-investment firm.

USA after 180 years have returned to the position List wrote about in 1827; a country in need of a larger export industry to support its import - only this time the “dangerous” trading partner is not England but China.

As we shall see below, a leading main stream scholar like Paul Samuelson had a pragmatic view on these matters of trade policy, and in fact supported Mercantilist practices;<sup>434</sup> Recently, the “Nobel” Laureate Paul Krugman wrote an editorial opinion in *The New York Times*, warning China,

... there’s the claim that protectionism is always a bad thing, in any circumstances. If that’s what you believe, however, you learned Econ 101 from the wrong people — because when unemployment is high and the government can’t restore full employment, the usual rules don’t apply.

Let me quote from a classic paper by the late Paul Samuelson, who more or less created modern economics: “With employment less than full ... all the debunked mercantilistic arguments” — that is, claims that nations who subsidize their exports effectively steal jobs from other countries — “turn out to be valid.” He then went on to argue that persistently misaligned exchange rates create “genuine problems for free-trade apologetics.” The best answer to these problems is getting exchange rates back to where they ought to be. But that’s exactly what China is refusing to let happen.

The bottom line is that Chinese mercantilism is a growing problem, and the victims of that mercantilism have little to lose from a trade confrontation. So I’d urge China’s government to reconsider its stubbornness. Otherwise, the very mild protectionism it’s currently complaining about will be the start of something much bigger. (Krugman, 2009)

Both Samuelson’s and Krugman’s articles similarly illustrate that the balance of trade and payment issues that both Mercantilism and Friedrich List struggled with, are of high current and practical interest.

In a syndicated article in 2009, Dani Rodrik, an expert of international trade at Harvard University, claims that the only way to solve the immense trade and payment imbalances between the US and China, is to rewrite the WTO rules, allowing China to reintroduce industrial policies. In other words, and unlike Krugman, Rodrik lays the blame not at China, but at the doorstep of the countries that dominate the WTO,

China’s undervalued currency and huge trade surplus pose great risks to the world economy. They threaten a major protectionist backlash in the United States and Europe. ...

Before it joined the World Trade Organization in 2001, China had a wider range of policy instruments for achieving this end. It could promote its industries through high tariffs, explicit subsidies, domestic content requirements on foreign firms, investment incentives, and many other forms of industrial policy. But WTO membership has made it difficult, if not impossi-

---

<sup>434</sup> Cf. the article by Paul A. Samuelson, quoted by Paul Krugman, *Theoretical notes on trade problems*, chapter 6: ‘Deficits, Overvaluation, and Mercantilism’, (Samuelson, 1964, p. 146)

ble, to resort to these traditional forms of industrial support. China's tariffs declined precipitously in the late 1990's, and many of the other inducements were also phased out. Currency undervaluation has become a substitute.

... China must live with restrictions on its industrial policies that none of these other countries, in pre-WTO days, had to abide by.

So we are left, it seems, with two equally unappetizing options. China can maintain its currency practices, but at the risk of large global macroeconomic imbalances and a major political backlash in the US and elsewhere. Or it can let its currency appreciate, at the risk of inducing a growth slowdown and political and social unrest at home. It is not clear that advocates of this option have fully comprehended its potentially severe adverse consequences.

There is, of course, a third path, but it would require re-writing the WTO's rules. If China were allowed a free hand with industrial policies, it could promote manufactures directly while allowing the renminbi to appreciate. This way the increased demand for its industrial output would come from domestic rather than foreign consumers.

It is not a pretty solution, but it is the only one. The great advantage of industrial policies is that they enable growth-promoting structural change *without* generating trade surpluses. They are the only way to reconcile China's continued need for industrialization with the world economy's requirement of lower current-account imbalances. (Rodrik, 2009)

Similarly, "Nobel" laureate and former chief economist at the World Bank, Joseph Stiglitz, blames not China but rather US hypocrisy and selective use of arguments. Under the subtitle "In reality, the US has only itself to blame for its swelling trade deficit", he writes in *The Guardian*,

For those who recall east Asia's crisis of five years ago, much of this seems to run counter to what was said then. China was urged not to float its currency. ...

In fact, China's overall trade surplus today is small, around 1% of its GDP. Of course, the Bush administration wants to shift the blame, but neither China, nor anyone else, should be fooled. This is reminiscent of what happened 20 years ago, when President Reagan engineered huge tax cuts which incited huge fiscal deficits, which in turn led to huge trade deficits. Back then, Japan was blamed!

The harsh truth is that neither the IMF nor the Bush administration really believes in free markets. They interfere with markets when it suits their purposes. Bush supported bailouts for airlines, unprecedented subsidies for agriculture and tariff protections for steel. (Stiglitz, 2003)

In exchange for a differentiated industrial- and tariff policy China is supposed to have been "forced" into a policy of general export subsidies by sticking to an under-valued currency. Now, there are reasons not to take this US debate concerning Chinese surplus too seriously, since there are facts pointing in other directions: The Chinese foreign trade currency, the renminbi, has repeatedly been re-valued by double-digit figures. Furthermore, China's trade surplus is with the West and not

general, since it has a trade deficit with many Asian trading partners. – And, as has been pointed out so oft, the US itself conceals her own differentiated tariff policy under various garments, in particular concerns of “national security”.

### **6.38 Protection, once again?**

List's support of restrictions to national and international financial activity and support for naval construction, in addition to this support of trade restrictions, sought to remedy inefficient monopoly situations where Britain had the upper hand.

In her monopoly-like situation Britain could enforce trade agreements more or less at its own will through debt & credit agreements and through naval force using blockades etc., to the detriment of its emerging competitors - precisely as the Phoenicians, Greeks, Venetians, Norse, Hanse, Dutch, etc. had done before them.

Many would claim the (Anglo-) Americans have been doing the same during the post WWII period through the international organisations they still just about dominate under the UN umbrella (WTO, IMF, IBRD (The World Bank) ILO, FAO, UNDP, etc.). - And when the Americans have not got matters their way, they have tended to forget these organisations and their policy - as has been demonstrated in the past. This has not been done directly, but under the cover of legal pretences, such as a claim of dumping, for which retort is allowed. A legal case may take years to sort out and act upon, and by then the problem may have resolved itself.

One practical instance is the punishment tariff put on a Quebec based magnesium producer during the 1980s<sup>435</sup>, a second case is the help that US auto producers received in 2008 (see below), a third case is the long-lasting 26 % punishment tariff put on all salmon imported from Norway, and a fourth case is the steel tariffs imposed by Pres. G. W. Bush on China in 2002 (Bush, 2002). The latter was legitimised by blaming foreign interventions in the market, forcing American authorities to retaliate in order to restore the free market forces,

These safeguards are expressly sanctioned by the rules of the World Trade Organization, which recognizes that sometimes imports can cause such serious harm to domestic industries that temporary restraints are warranted. This is one of those times.

I take this action to give our domestic steel industry an opportunity to adjust to surges in foreign imports, recognizing the harm from 50 years of foreign government intervention in the global steel market, which has resulted in bankruptcies, serious dislocation, and job loss. We also must

---

<sup>435</sup> I.e. the Norwegian company *Norsk Hydro* which supposedly was subsidised by the Canadian government with cheap electricity. The complainant was a US company with outdated and polluting technology (Source: 'kitchen talks' with my late father, who was in charge of the Quebec factory).

continue to urge our trading partners to eliminate global inefficient excess capacity and market-distorting practices, such as subsidies. (Bush, 2002)

No legal arrangement is ever water tight, since there always will be room for interpretation. Therefore, no trade treaty is water tight, including WTO treaties and regulations. In the end it all comes down to convenience and flexing power muscles. I again refer to Joseph Stiglitz' argument, that both the IMF and President G.W. Bush are pragmatists who interfere with markets and use protection as it suits non-ideological purposes.<sup>436</sup>

The very generous US car loans in 2008 is a fitting illustration. They caused EU carmakers to ask for similar arrangements within the EU, arguing that the US was subsidising its own car producers by making rules that exempted foreign owned producers in the US,

Europe's carmakers are to ask the European Commission for a €40bn (\$55bn) loan to develop environmentally-friendly products in response to a US move to support domestic manufacturers. ...

The US loan has caused some concern among German carmakers such as Volkswagen, which think it could discriminate against non-US manufacturers. Although the full details need to be decided, at present the US loan would apply only to factories older than 20 years – ruling out most foreign-owned plants. (Milne, 2008)

The point is that the principles regarding production and trade that List tried to extract from his historical research, may prove to be expedient and of much use, still.

An increasing number of books and articles have appeared since the 1980s both pro and con List's ideas, in relation to the present US situation of increasing competition from Asia - not only in the academic community but also in the financial- and strategic communities.<sup>437</sup> Noticeable are James Fallows' article in *The Atlantic* (Fallows, 1993), and Michael Lind's articles *Hamilton's Legacy*, *The Op-Ed history of America*, and *The time is ripe for the third man* (Lind, 1994a, 1994b and 1998). Lind starts – and ends - his last article such,

Forget Marx and Smith. Friedrich List is the economist for us. ... Listian liberalism can provide the centre-left with a programme. (Lind, 1998)

Lind makes a notable comment in 1994 that is even more acute today – for the EU as for the USA. Lind argues that developing countries must be allowed to protect themselves, or the developed countries will be swarmed with refugees,

---

<sup>436</sup> Cf. Stiglitz, 2003, quoted in the above section; *Balance of payments, once again*.

<sup>437</sup> See the section in the *Introduction* above; *Recent interest in List*; and the section above; *Balance of payments, once again*, *Protection, once again*. *Debt lessons*

... , if today's industrial countries, all of which developed through protection, instruct Third World countries that they can catch up by means of unrestricted free trade policies, then we as well as they will pay a price for our ill-informed counsel, when the laissez-faire experiment fails and impoverished refugees crowd our borders. (Lind, 1994b)

Likewise, List has been criticised by other vocal intellectuals, most notably the Nobel laureate Paul Krugman (1994a, 1994b, 1996). As an indication, of the renewed interest in non-free trade solutions we may quote what Nicholas D. Kristof wrote in an op-ed article 'The New Democratic Scapegoat' in *The New York Times* in 2007,

For eight years, Mr. Clinton tugged Democrats away from protectionist impulses and toward pro-growth and pro-trade policies that elevated America's standard of living. Now the Democratic Party as a whole is retreating from that free trade legacy. (Kristof, 2007)

The revisionist movement on the Republican side of American politics started even before that. Since at least 1991,<sup>438</sup> Pat Buchanan<sup>439</sup> has repeatedly pointed to the lessons from List. Buchanan illustrates how these historical events are understood in more popular literature:

To David Ricardo's argument that we should abandon the home industry and rely on imports if a foreign nation could manufacture more cheaply, Friedrich List's reply was withering: "Who would be consoled for the loss of an arm by the knowing that he had nevertheless bought his shirts forty percent cheaper?" (Buchanan, 1996, p. 195)

Buchanan also makes a comment about a form of taxation, tariffs, that is well suited to developing countries because of its simplicity,

A shift in taxation away from incomes, onto foreign goods, is how Bismarck built the German nation. (Buchanan, 1996, p. 299)

However, Buchanan opportunistically turned List's argument for infant-industry protection in order to further higher productivity into an argument (of his own) for protection of grandfather-industries, with precisely the opposite effect from what List had promoted.

The interest in protection goes far beyond the theoretical, as is evident with the increasing number of US imposed trade restrictions, thus adding to the traditional protection of its farmers and very broadly defined "armaments industry". The USA in practice never relinquished

---

<sup>438</sup> With the book *America Asleep. The Free Trade Syndrome and the Global Economic Challenge. A New Conservative Foreign Economic Policy for America* (Cf. Buchanan, 1991).

<sup>439</sup> Patrick Buchanan is a former Republican senior advisor to American Presidents Richard Nixon, Gerald Ford, and Ronald Reagan (both periods), and a Presidential Candidate for the Republicans in 1992 and 1996, and for the Reform Party in 2000.

its trade regulations dating from before the Civil War, contradicting the US rhetoric, but the new element in the situation is that the trade restrictions are rapidly increasing. This is increasingly a hot issue between the USA and other major world traders.

Recent convulsions in global markets have haunted believers in unfettered markets, although some may still see the effects of instability as beneficial in a longer term. Trade imbalances leading to currency instabilities have played their part in provoking financial crisis.

The following quotation hints at a counterargument to the vulgarised version of Werner Sombart's concept of 'creative destruction', later popularised by Joseph Schumpeter, known as 'Schumpeter's gale'. The original significance of the concept describes the process of transformation that accompanies radical innovation. Nevertheless, some have used the concept to argue that business crises serve a useful purpose, by cleansing and purifying the economic system - thereby rendering it more efficient in the longer run. The following headings from the credit crisis in 2008 illustrate,

*What crisis? This is creative destruction.*<sup>440</sup>

*'CREATIVE DESTRUCTION' – THE MADNESS OF THE GLOBAL ECONOMY*<sup>441</sup>

Dani Rodrik, writes in his blog about Martin Wolf, a leading columnist of the London based *Financial Times*,

Martin Wolf has written the best thing I have seen in a very long time on the momentous transformation the world economy is undergoing. (Rodrik, 2007)

"It is capitalism, not communism, that generates what the communist Leon Trotsky once called "permanent revolution". It is the only economic system of which that is true. Joseph Schumpeter called it "creative destruction". Now, after the fall of its adversary, has come another revolutionary period. Capitalism is mutating once again.

"Much of the institutional scenery of two decades ago – distinct national business elites, stable managerial control over companies and long-term relationships with financial institutions – is disappearing into economic history. We have, instead the triumph of the global over the local, of the speculator over the manager and of the financier over the producer. We are witnessing the transformation of mid-20th century managerial capitalism into global financial capitalism." (Wolf, 2007)

---

<sup>440</sup> Cf.:

<<http://www.prospectmagazine.co.uk/2008/11/whatcrisisthisiscratedestruction/>>, Accessed 2010-04-05

<sup>441</sup> Cf.:

<[http://www.medialens.org/alerts/08/080205\\_creative\\_destruction\\_the.php](http://www.medialens.org/alerts/08/080205_creative_destruction_the.php)>, Accessed 2010-04-05

Dani Rodrik comments that the imbalance between unfettered financial powers and fragmented political structures invites global rethinking,

I am among those who see the future risks as being substantial. I think there is a fundamental incompatibility between unfettered global finance and a fragmented system of political sovereignty at the national level.. I am also not convinced that this new international financial capitalism has actually lived up to its promise: it has on the whole not been beneficial to developing nations, and it has created great inequality in the rich countries (as Wolf acknowledges). So we need a substantial rethink. (Rodrik, 2007)

The huge efforts internationally to help e.g. the financial industry through the financial crisis from 2008, is an indication that what matters for governments short term, in an unstable situation, is to secure the creditary infrastructure, a core part of mental capital, and an integral part of the national confederation of Labour.<sup>442</sup> It should be remembered that there are considerable vested interests involved as well, when major creditors risk taking a haircut. In addition, a returning and major problem in e.g. the US economy is the impact of its political system, where politicians are financed out of private purses, in particular Wall Street's. Thus, the priorities of a politician may soon benefit benefactors rather than people's economy.

Nevertheless, the huge efforts to help e.g. the car industry through the financial crisis, is an indication that in an unstable situation it still matters for governments to secure the mental capital. It is relatively easy to preserve buildings and machinery for the short- to medium term, but technical-, commercial-, and social skills and -networks are fragile, for instance since wage earners need to be paid per week or month to pay their bills. If not, they may move to other jobs elsewhere.

The juridical and regulatory point here, regarding interventions, concerns preference of pro-active promotion of stability as against re-active punishment of acts committed after the decay of wealth and morality, illustrating that regulation to prevent crime is better than punishing it after it has been committed.

---

<sup>442</sup> Adam Smith clearly sees the fragility of credit: "The capital, however, that is acquired to any country by commerce and manufactures is all a very precarious and uncertain possession till some part of it has been secured and realized in the cultivation and improvement of its lands." (Smith, 1776, book III; ch. IV)



## 7.0 Sovereignty and international power

### Contents

7.01 Summary:	410
7.02 Introduction	412
7.03 War and strategic geography	413
7.04 England's geographical position	415
7.05 English protectionism	417
7.06 Smith as regulator and protectionist	420
7.07 Contradiction between free trade theory and British practice	425
7.08 England's strategy of confusion	427
7.09 England's strategy of domination	429
7.10 Combating Britain's monopolies and unfair treaties	430
7.11 Combatting Britain's monopoly trade with colonies	431
7.12 British strategists substantiate List's claims	432
7.13 British policy after List - the Edwardians	435
a) Socio-political affairs;	438
b) Strategic and military affairs	440
c) Economic affairs;	442
7.14 German awakening	444
7.15 Essential requirements for a sovereign nation	445
7.16 Access to sea, navies and blockades	448
7.17 Railroads and the balance between Land- and Sea powers	450
7.18 'Independent vassalage' and tropical colonies	453
7.19 Colonies, division of labour and free trade	454
a) Natural division of labour	456
b) Colonial goods as a catalyst for activity	457
c) Benevolent imperialism - Occidental tutelage of the Orient	458
d) Colonial free trade	460
7.20 List and German policies	461
a) Against racism	462
b) Against slavery	465
c) Naval armament	465
d) The Anglo-German alliance	466
e) Customs union as expansionism?	467
f) German expansionism	469
7.21 A European defence union	470
7.22 Common interest in free trade	476
7.23 Common interests? – recent development	477
7.24 Curing global market imperfections	480
7.25 A sudden & universal republic of merchants	483
7.26 Global free trade - gradually	486
7.27 A gradual & universal republic of peoples	488
7.28 A universal confederation of nations	490
7.29 From protection to free trade	493
7.30 Promote free trade by international law, treaties and congresses	494
7.31 Contradictions in List's arguments?	498
a) A promoter both of protection and free trade?	498
b) More or less regulation? - State intervention versus free trade	501

## 7.01 Summary:

List argues that England for centuries followed a consciously laid out policy of monopolising productive power and material wealth, and has done so successfully. In doing so, England has accomplished many praiseworthy things, as in science, technology and the arts, but she has also used her immense powers to obstruct and undermine the efforts of other nations to develop into civilised and prosperous states, “kicking away the ladder” which she herself had climbed, as List put it. This was partly an inheritance from the strategies of other nations, partly a result of England’s geographical position, and ... of choice.

England protected her interests in two ways, with theory and in practice.

List argues that Smith’s theory was designed to confuse competitors, and thus to prevent them from using the strategy that England herself had used. Historically England had used strong protection and regulation to achieve industrial and naval supremacy. List also argues that Smith in reality was a protectionist, while sailing under a free trade and anti-regulations banner.

England’s practice as against competing nations was to use Smith’s theory of comparative advantages to negotiate trade treaties that would undermine the aspirations of competitors abroad. Furthermore, by using her close to monopoly power in most types of manufacturing, she was able to use temporary price dumping against competitors. Furthermore, since she had access to cheaper credit and faster transport, England managed to slay competition abroad, sometimes also by dumping.

List argues that if English de facto monopolies were to meet greater competition from newcomers abroad this would level the playing field and cure global market imperfections. This would not only create material and immaterial wealth in England and in countries other than England, but it would also improve global economic efficiency and elevate global civilisation.

List accordingly argues that less developed nations must defend themselves in two ways, theoretically and in practice.

First, the less developed nations must understand how England tricks them. List asked for development of and education in an alternative theory, which also would expose the errors of Smith’s theory.

English theory and practice were two different planets List argues, the first made for export and the second made for domestic consumption.

In practice, List argues that less developed nations have a duty to protect its citizens and develop their productive powers.

This can in principle be done in two ways, unilaterally (and bilaterally) as in Mercantilism, or multilaterally as in Liberalism – ‘Cosmopolitanism’ as List calls it.

List is a political realist, taking notice of how the world actually has been working and will work for the foreseeable future, and he develops a theory of economic unilateralism, economic nationalism.

He understands that this is not an optimal arrangement, involving much strife and inefficiency among nations, and he develops a strategy of how economic multilateralism, economic internationalism - free trade, can be approached.

To establish sovereignty the unilateral way, there are certain general requirements that a nation must meet. A nation must be able to supply itself with all necessities, also in times of war and crises. These necessities are both manufactured goods and raw materials, and the nation must control its immaterial and material infrastructure, such as health, education, credit and transportation. These requirements are seldom at hand in smaller nations and have to be acquired by expanding one's territory. Expansion can be accomplished in several ways, by conquering land as in the past and by unification. List argues that wars are destructive in both moral and material ways, and therefore the time of accomplishing this by violence should be over and gone. The time has come for free- and peaceful negotiations and agreements, he claims.

List's position on 'strategic geography' is very much focused on water-based transport: A nation that has none, or does not control any; coast, rivers; navy; and merchant marine, is dependent on other nations. Thus, it suffers from limited sovereignty (Cf. List, 1841a, p. 176). Nevertheless, he was to argue that the construction of extensive railroad networks was to change this situation dramatically for the Eurasian continent.

For Germany it was necessary to gain control over its main transport artery, the River Rhine, and the Netherlands ought therefore to join the German Customs Union. Likewise, Germany needed to control its coast and harbours. Therefore, Denmark and the Netherlands ought to join the Zollverein. Denmark and the Netherlands would also gain from this since they would gain access to the large German market, but by themselves alone, they would be pawns in the hands of larger nations.

Furthermore, Germany needed access to colonial products, and therefore needed colonies in the tropical sphere. To trade abroad Germany needed a merchant fleet, and to protect its commerce abroad Germany needed an adequate navy. Railroads could accomplish on land what a merchant fleet could accomplish on the oceans, and List advised the construction of a railroad from Berlin to Bombay in British occupied India.

'Adequate' navy, means being able to fend off the greatest forces to be confronted with, and in List's day this was England. List saw that the naval and railroad strategy was inviting severe international complications, and invited England to see the mutual interest in an alliance between England and Germany. This was turned down by Lord Palmerston and Sir Robert Peel in 1846.

The strategy of development that List suggested, was in principle the English strategy as it had been followed in practice. The difference was

that England sought world dominance over other nations, as had been the tradition for centuries. List on the other hand sought equality of nations, apart from tropical colonies, which were subject states for 'climatic' reasons, according to List.

Were other nations to continue to seek national sovereignty along the distrustful, self-asserting, egotistical, and non-co-operative lines that the English and other nations before her had chosen, this was certain to cause confrontation.

Therefore, if a neo-mercantilist strategy was destructive, a gradual and legally oriented road to mutual trust and free universal trade ought to be found - in a Harmony of Interests.

List accordingly develops a "parallel" multilateral strategy of how to approach a universal political and commercial union of real free trade, as opposed to phoney free trade under English domination.

List argues that the advanced nations, including England, would gain from opening up their monopoly trade with their colonies, to other nations. This would set free competition and commerce lift the civilisations of both the advanced countries and the colonies. List argues that to respect and place all nations on an equal basis; they must all first be allowed to follow the unilateral road of development. This would allow all nations to develop their productive forces, thus making them mentally and physically fit for peaceful co-operation with other countries, universal peace and prosperity.

In parallel, however, efforts should be made towards gradual unification, first on a national level (Germany), then on a Continental level (Europe) and finally on a global level. This would gradually be institutionalised in legal frameworks such as trade agreements and in organisations, such as a 'World Trade Congress', a 'World Customs Union', and eventually in a 'World Government'. This would lead to an international - and eventually a global rule of law. France and the United States should take the initiative and England would then follow, List argues. This would be in England's interest, as she then would avoid domination by the United States' egotism in the future. The question of universal free trade connects tightly to the question of political unification of all nations under one law.

## **7.02 Introduction**

This chapter is not needed to understand List's system of productive forces, being primarily based on mental capital, but the theme of sovereignty and international power, illuminates the problem that List's strategy of domestic wealth creation faced in an international setting, and the solutions that he suggested.

In List's opinion, he was a constructive and realistic reformer in the pursuit of free trade and universal progress. The Cosmopolitan School on the other hand were destructive utopian revolutionaries, who really

had an agenda other than free trade – namely continued English monopoly.

Because of his insights into the complex web of inter-relationships of economics, we may say that List viewed economic affairs from a cultural and political point of view, i.e. he regarded himself as a student of political economy. In fact, it might be more appropriate to name his approach one of geo-cultural economics, as he was deeply concerned with international cultural and political matters, and their effects on his own nation.

### 7.03 War and strategic geography

In his classic *Makers of Modern Strategy...*, Edward Earle values List's understanding of the sources of military power favourably and writes that,

List had a keen appreciation of the factors which enter into the military potential. (Earle, 1943b, p. 141 and footnote)

Earle writes that List admired the realist politics of Alexander Hamilton and the nationalism of Andrew Jackson,

... List was first, last, and above all a German. He was always an unhappy exile in America ... He admired, ... the *Realpolitik* of Hamilton, the lusty nationalism of Jackson, the American enthusiasm for railways and canals, and the seemingly unlimited possibilities for the future of the United States as a world power.<sup>67</sup> (Earle, 1943b, p. 141)

In a footnote, Earle notes that in List's opinion, the USA would soon surpass Britain,

(67) List firmly believed that the United States would, within a century, surpass Britain in industry, wealth, commerce, and naval power. *The National System*, pp. 40, 77-86, 339. (Earle, 1943b, p. 141n)

List emphasises that the increasing importance of the technical sciences for warfare causes manufacturing to become a political question, and Earle ends a long quotation from List such,

At a time where technical and mechanical science exercise such immense influence on the methods of warfare, ... - at such a time, more than ever before, must the value of manufactures be estimated from a political point of view. (List, 1841a, p. 209)<sup>443</sup>

---

<sup>443</sup> It is noteworthy that List also here mentions several immaterial issues related to the state of a people, such as intelligence, energetic, and sympathy; A more extensive quotation reads: "At a time where technical and mechanical science exercise such immense influence on the methods of warfare, where all warlike operations depend so much on the condition of the national revenue,

It is noteworthy how the path-breaking figure in geography, Friedrich Ratzel (1844-1904), perceived List's system. Ratzel developed his science field into geopolitics, by fusing politics and geography. With Ratzel, one can notice much of the same focus on geographical preconditions for national independence (necessitating political- and therefore economic power). Friedrich Ratzel is generally accepted as the father of geopolitics,<sup>444</sup> although following in the *Erdkunde*<sup>445</sup> ('Earth-knowledge') tradition of Karl Ritter and Alexander von Humboldt.

A row of eminent and critical scholars emanated in the footsteps of Ratzel.<sup>446</sup> Ratzel was born two years after List died, and grew up during the period when List's ideas gained momentum in Germany. Ratzel argues that List was among the first economists to recognise the "significance of the land territory of a nation",

Friedrich List was the first among economists to clearly recognize the economic and political significance of the land territory of a nation. When he set up his system, economics was under the influence of Adam Smith's teachings, in which he only recognized "a system of private economy of all individuals of a country". Against Smith List set his teachings, ... (Ratzel, 1897, p. 190)

---

where successful defence greatly depends on the questions, whether the mass of the nation is rich or poor, intelligent or stupid, energetic or sunk in apathy; whether its sympathies are given exclusively to the fatherland or partly to foreign countries; whether it can muster many or but few defenders of the country -- at such a time, more than ever before, must the value of manufactures be estimated from a political point of view." (List, 1841a, p. 209)

<sup>444</sup> "German geographer and a founder of modern political geography, the study of the influence of environment on politics. ... The German geographers Ferdinand von Richthofen and Alfred Hettner brought the ideas of Humboldt, Ritter, and Ratzel into a coherent system." (*Encarta Encyclopaedia*, 2009, 'Friedrich Ratzel' and 'Geography'), and, "German geographer and ethnographer and a principal influence in the modern development of both disciplines. He originated the concept of *Lebensraum*, or living space, which relates human groups to the spatial units where they develop. ... Though influenced by the evolutionary theories of Darwin and of the German zoologist Ernst Heinrich Haeckel, Ratzel became critical of the mechanistic quality of their views. Philosophy, rather than biology, came to dominate his later thought." (*Encyclopaedia Britannica*, 2009, 'Friedrich Ratzel')

<sup>445</sup> Literary 'Earth knowledge', meaning physical geography.

<sup>446</sup> Such as Rudolf Kjellén in Sweden, who coined the term 'geopolitics', Halford J. Mackinder in Great Britain, Karl Haushofer in Germany and then Jordis von Lohausen in Germany, Anton Zischka in Czechoslovakia, Georgi Plekhanov in Russia, and Sun Yat-sen in Russia/China – in addition to influencing Anton Mohr and Einar Maseng in Norway and Zbigniew Brezinski in the USA (Cf. e.g. Brezinski, *The Great Chess Game*, 1997, where he focuses on Central Asia's pivotal role).

List shaped the field of economic and military geography considerably. I will excerpt a little from my studies on this issue to establish the point.

List was not without forerunners. Largely forgotten is the influence on List from domestic German sources, like General Christian Massenbach (1758– 1827), also from Württemberg. He was educated as a mathematician and served as a topographic engineer, and staff strategist under Prussian and Russian commandos. He is credited with founding the German concept of a ‘general staff’ as the intellectual centre of military strategy.

#### **7.04 England’s geographical position**

Friedrich List had a watchful eye to the defensive geographical advantages of the leading nation of the day, allowing England to develop her political institutions and manufactures in relative peace. Besides, through British involvement in foreign wars, British manufacture received immense orders and therefore opportunities to develop. List writes,

The geographical position of England, too, has exercised an immense influence upon the independent development of the nation. England in its relation to the continent of Europe has ever been a world by itself; and was always exempt from the effects of the rivalries, the prejudices, the selfishness, the passions, and the disasters of her Continental neighbours. To this isolated condition she is mainly indebted for the independent and unalloyed growth of her political constitution, for the undisturbed consummation of the Reformation, and for the secularisation of ecclesiastical property which has proved so beneficial to her industries. To the same cause she is also indebted for that continuous peace, which, with the exception of the period of the civil war, she has enjoyed for a series of centuries, and which enabled her to dispense with standing armies, while facilitating the early introduction of a consistent customs system.

By reason of her insular position, England not only enjoyed immunity from territorial wars, but she also derived immense advantages for her manufacturing supremacy from the Continental wars. Land wars and devastations of territory inflict manifold injury upon the manufactures at the seat of hostilities; ... While in Germany this condition of things recurred twice in every hundred years, and caused German manufactures to retrograde, those of England made uninterrupted progress. English manufacturers, as opposed to their Continental competitors, enjoyed a double and treble advantage whenever England, by fitting out fleets and armies, by subsidies, or by both these means combined, proceeded to take an active part in foreign wars. (List, 1841a, pp. 53-54)

List also notices the more offensive geographic strategy of England, but forgets to mention how England actively hindered other nations from following the same policy. Nevertheless, he hints at this,

England has got into her possession the keys of every sea, and placed a sentry over every nation: ... She possesses every important strategical position ... She needs only the further acquisition of the Dardanelles, the Sound, and the Isthmuses of Suez and Panama, in order to be able to open and close at her pleasure every sea and every maritime highway. Her navy alone surpasses the combined maritime forces of all other countries, ...

Her manufacturing capacity excels in importance that of all other nations. (List, 1841a, pp. 46-47)<sup>447</sup>

It may have been ‘natural’ for a global empire like the British- to think in global terms, and to export global “free trade” ideas to countries that were far from global. Nevertheless, British promotion of free trade had a political side that seldom is mentioned. By making other countries dependent on trade to survive they also became dependent on transport overseas, where the British Empire totally dominated in both peace and war. The British were anxious to preserve this hegemony and were successful for a long time; the British Navy ruled the waves and continued to do so until the end of WW II.

Sir Walter Raleigh, the British explorer of the Americas confronting Spain’s supremacy, based Great Britain’s strategy for domination of the world on the famous words,

For whosoever commands the sea commands the trade; whosoever commands the trade of the world commands the riches of the world, and consequently the world itself. (Raleigh, 1615, p. 325)

In his book on international law at sea (‘World despotism and liberty at sea’; Aall, 1939) Prof. at Law, Herman Harris Aall, quotes Sir Cecil Hurst, who was the British representative at a meeting at the *League of Nations* (in Geneva, 12 Sept. 1924). Hurst declared that,

There is no international law – in particular not at sea. (Quoted in Aall, 1939, the preface, retranslated by me)

Aall also quotes the British strategist Prof. John Robert Seeley, who was even more direct,

We hold that the oceans belong to us according to the will of nature, and along this Road of Kings, we work to subdue the earth. (Quoted in Aall, 1939, Ch. 9, retranslated by me)

England did not intend to be wing-clipped at sea by international laws and regulations. Earle argues that Britain learnt that it was in her self-interest to abandon trade protection but never supremacy at sea,

---

<sup>447</sup> ‘the Sound’ refers to Oeresound (Øresund), the entrance to the Baltic Ocean. List could have mentioned many strategic outposts, such as Gibraltar, Heligoland, South Africa, Jemen, St. Helena, the Falksland Islands, Singapore and Hong Kong.



Insofar as Great Britain was concerned, the heart of the mercantilist system - the ark of the covenant - was the Navigation Acts. Mercantilism in its other aspects may have been essential at an earlier period of its development, but by the end of the eighteenth century England was so far advanced industrially that protectionism was of much less importance to it than to France and the German states. The British could have afforded, if necessary, to dispense with duties on most manufactures because they were without serious competition in their domestic and overseas markets. Indeed, Great Britain was later, in self interest, to abandon its earlier restrictive policies because it had learned, as Bismarck said, that "free trade is the weapon of the strongest." But sea power was another matter, and anything related to it had to be judged by different criteria. The safety of the homeland and the empire demanded that Britain have virtually unchallenged control of the ocean highways; ... (Earle, 1943b, p. 122)

### 7.05 English protectionism

Several historians argue that one important reason for British commercial and imperial success not at all was its free trade practice, but rather its stronger co-ordination and centralisation than that of her competitors (Cf. e.g. Harper, 1939; Bairoch, 1983; Hudson, 1992; Israel, 1992). In *Trade, Development and Foreign Debt*, Michael Hudson writes, and quotes British Parliamentary debates regarding the protectionist British Navigation Laws,<sup>448</sup> where the argument is that just as England 'stole the robe' from the Netherlands with the help of protectionism, USA was now applying the same game towards England,

The self-centred, nationalistic ideal of British free trade, like that of earlier mercantilism, held that strong economies would grow stronger while less developed countries would become more dependent. This view was epitomised during the Corn Law debates in 1846, when (as Semmel quotes), 'one Whig, speaking before the House of Commons ... described free trade as the beneficent "principle" by which "foreign nations would become valuable Colonies to us, without imposing on us the responsibility of governing them." All that was necessary was for England to repeal its Corn Laws 'to create a vast English market for foreign grain; in this way, the agricultural nations of the world might be given a stake in England's Empire of Free Trade.'

British protectionism had run its course. It had fulfilled its function of endowing Britain with the world's pre-eminent industrial plant, but it was no longer economically feasible. How could Britain expect of the countries

---

<sup>448</sup> The British Navigation Laws were introduced in 1651, caused the first Anglo-Dutch war, and were modeled on the Hanseatic navigation laws which again were modeled on the Venetian navigation laws, which again may have been modeled on the Phoenician navigation Laws since the Venetians had learned other practices from the Phoenicians, basing trade on manufacture as this was conceived as more rewarding than purely on entrepot trade (import-export without refining the goods); and therefore as well: glass production (Cf. Rawlinson, *History of Phoenicia*, 1889, p. 97; and Ch. 8-9).

to open their markets to British products if it kept its own markets closed? The parliamentary architect of British free trade, William Huskinsson, summarised the issue explicitly in 1826:<sup>449</sup>

... Did the United States of America, ... carry, even further than we had ever done, in respect to foreign Ships, this principle of discriminating duties against our Shipping? Can we shut our eyes to the fact that other nations have followed, or are following their example? Do we not see them, one after the other, taking a leaf out of our own book? ... Did the success of the United States of America create no desire in those countries to follow her example?

Under what circumstances did England found her Navigation System? When her commercial Marine was, comparatively, insignificant, her wealth inconsiderable, before manufactures were established, and when she exported corn, wool, and other raw materials. When, on the other hand, Holland and the Netherlands were rich, possessed of great manufactures, and of the largest portion of the carrying trade of Europe and the world. What has followed? The commercial Marine of the latter countries has dwindled away, and that of Great Britain is now immense. But, in the progress of the change, England is become the great seat of manufactures and trading wealth, frequently importing, and never exporting corn; drawing raw materials from, and sending out manufactured goods to, all parts of the world. This was our state, though in a far less degree than at present, when America became independent. She started by applying towards us the system, which we have applied towards Holland. (Hudson, 1992, pp.95-96)

Friedrich List advocated governmental interventions in order to develop a country, and as his prime example he pointed to the successful history of England,

Whoever is not yet convinced ... let him first study the history of English industry before he ventures to frame theoretical systems, or to give counsel to practical statesmen to whose hands is given the power of promoting the weal or the woe of nations. ... The fruits it has borne lie revealed to the eyes of the whole world. (List, 1841a, pp. 39-40)

List continues by arguing that that English policy for centuries deliberately promoted “exportation of manufactured goods and the importation of foreign raw material”,

Under George I English statesmen had long ago clearly perceived the grounds on which the greatness of the nation depends. At the opening of Parliament in 1721, the King is made to say by the Ministry, that ‘it is evident that nothing so much contributes to promote the public well-being as the exportation of manufactured goods and the importation of foreign raw material.’<sup>450</sup>

This for centuries had been the ruling maxim of English commercial policy, as formerly it had been that of the commercial policy of the Venetian

---

<sup>449</sup> The quotation from Huskinsson has been shortened. (AMD’s note)

<sup>450</sup> 1: See Ustaritz: *Theorie du Commerce*, ch. Xxviii. ... (List’s note)

Republic. It is in force at this day (1841) just as it was in the days of Elizabeth. The fruits it has borne lie revealed to the eyes of the whole world. (List, 1841a, pp. 39-40)

List sums up a whole range of British state regulations on commerce and manufacturing intended to further these two activities (exportation of manufactured goods and importation of foreign raw materials),

In our previous chapters we have pointed out the results of such denationalisation, and shown that the culture and civilisation of the human race can only be brought about by placing many nations in similar positions of civilisation, wealth, and power; that just as England herself has raised herself from a condition of barbarism to her present high position, so the same path lies open for other nations to follow: and that at this time more than one nation is qualified to strive to attain the highest degree of civilisation, wealth, and power. Let us now state summarily the maxims of State policy by means of which England has attained her present greatness. They may be briefly stated thus:

Always to favour the importation of productive power, in preference to the importation of goods.

Carefully to cherish and to protect the development of the productive power.

To import only raw materials and agricultural products, and to export nothing but manufactured goods.

To direct any surplus of productive power to colonisation, and to the subjection of barbarous nations.

To reserve exclusively to the mother country the supply of the colonies and subject countries with manufactured goods, but in return to receive on preferential terms their raw materials and especially their colonial produce.

To devote especial care to the coast navigation; to the trade. Between the mother country and the colonies; to encourage seafisheries by means of bounties; and to take as active a part as possible in international navigation.

By these means to found a naval supremacy, and by means of it to extend foreign commerce, and continually to increase her colonial possessions.

To grant freedom in trade with the colonies and in navigation only so far as she can gain more by it than she loses.

To grant reciprocal navigation privileges only if the advantage is on the side of England, or if foreign nations can by that means be restrained from introducing restrictions on navigation in their own favour.

To grant concessions to foreign independent nations in respect of the import of agricultural products, only in case concessions in respect of her own manufactured products can be gained thereby.

In cases where such concessions cannot be obtained by treaty, to attain the object of them by means of contraband trade.

To make wars and to contract alliances with exclusive regard to her manufacturing, commercial, maritime, and colonial interests. To gain by these alike from friends and foes: from the latter by interrupting their commerce at sea; from the former by ruining their manufactures through subsidies which are paid in the shape of English manufactured goods. (List, 1841a, pp. 366-367)

English protectionism was even professed openly in Parliament, List writes,

These maxims were in former times plainly professed by all English ministers and parliamentary speakers. The ministers of George I in 1721 openly declared, on the occasion of the prohibition of the importation of the manufactures of India, that it was clear that a nation could only become wealthy and powerful if she imported raw materials and exported manufactured goods. Even in the times of Lords Chatham and North, they did not hesitate to declare in open Parliament that it ought not to be permitted that even a single horse-shoe nail should be manufactured in North America. (List, 1841a, p. 367)

## **7.06 Smith as regulator and protectionist**

List points out that Smith himself argues for protection, and even for retaliation,

Adam Smith allows in three cases the special protection of internal industry: firstly, as a measure of retaliation in case a foreign nation imposes restrictions on our imports, and there is hope of inducing it by means of reprisals to repeal those restrictions; secondly, for the defence of the nation, in case those manufacturing requirements which are necessary for defensive purposes could not under open competition be produced at home; thirdly, as a means of equalisation in case the products of foreigners are taxed lower than those of our home producers. J. B. Say objects to protection in all these cases, but admits it in a fourth case—namely, when some branch of industry is expected to become after the lapse of a few years so remunerative that it will then no longer need protection.

Thus it is Adam Smith who wants to introduce the principle of retaliation into commercial policy—a principle which would lead to the most absurd and most ruinous measures, ... (List, 1841a, ch. 27, p. 318)

List, however, dismisses revenge as such. He claims that retaliation only is justifiable if it serves “the industrial development of the nation”, and that the second and third arguments (defence and equalisation) in principle justifies the whole system of protection,

... really justifies not merely the necessity of protecting such manufactures as supply the immediate requirements of war, such as, for instance, manufactories of arms and powder, but the whole system of protection as we understand it; ... (List, 1841a, ch. 27, p. 319)

In *The Theory of Moral Sentiments* Adam Smith praises government in general (Smith, 1759, part VI, chapter I). This was, however, before he went to France in 1765 to learn about the French Physiocratic

School from Smith's favourite writer Baron Turgot,<sup>451</sup> to whom he wanted to dedicate his *Wealth of Nations*. Condorcet wrote of Turgot's essay that,

This Essay May be Considered as the Germ of the Treatise on "The Wealth of Nations", written by the Celebrated Smith. (Condorcet, 1786, p. 74)

Parallel to his mechanistic perception of the universe and the planetary system as a perfect machine, Smith seems to have gone from the ideal of "police" or "politicks" (government) as a perfect machine to the market as such a machine. In his earlier writings, *The Theory of Moral Sentiments*, (TMS), he therefore claimed that,

The same principle, the same love of system, the same regard to the beauty of order, of art and contrivance, frequently serves to recommend those institutions which tend to promote the public welfare. ... The perfection of police [AMD: i.e. policy], the extension of trade and manufactures, are noble and magnificent objects. The contemplation of them pleases us, and we are interested in whatever can tend to advance them. They make part of the great system of government, and the wheels of the political machine seem to move with more harmony and ease by means of them. We take pleasure in beholding the perfection of so beautiful and grand a system, and we are uneasy till we remove any obstruction that can in the least disturb or encumber the regularity of its motions. All constitutions of government, however, are valued only in proportion as they tend to promote the happiness of those who live under them. This is their sole use and end. From a certain spirit of system, however, from a certain love of art and contrivance, we sometimes seem to value the means more than the end, and to be eager to promote the happiness of our fellow-creatures, rather from a view to perfect and improve a certain beautiful and orderly system, than from any immediate sense or feeling of what they either suffer or enjoy. (Smith, 1759, part IV, chapter I, § 11, and p. 185 in Liberty Classics' edition)

---

<sup>17</sup> Anne-Robert-Jacques Turgot, Baron de Laune (1727-1781), of French-Norman stock. Indicating his interests, in his 1774 essay *Reflections on the Formation and Distribution of Wealth* (Turgot, 1774), Turgot mentions 'transport' twice, 'road', 'canal', 'rail', and 'legal' not at all and 'law' 15 times. Compare this with List: 83/15/26/18/6/132. A similar look at British theoretical Mercantilists is equally revealing of their poor interest in practical matters like infrastructure, which is the necessary physical foundation of any market.

This could be explained, however, by the British situation in infrastructure: It might be so good, relatively speaking, that there was no need for any discussion thereof. Nevertheless, practical men both France and England must have spent an enormous amount of time in the construction and maintenance of infrastructure. Somehow this ought to be mentioned in contemporary economic writing.

In addition, Smith adds a warning, that evil men may obstruct the great machine of government,

There have been men of the greatest public spirit, who have shown themselves in other respects not very sensible to the feelings of humanity. And on the contrary, there have been men of the greatest humanity, who seem to have been entirely devoid of public spirit. (Smith, 1759, part IV, chapter I, § 11, and p. 185 in Liberty Classics' edition)

In Smith's *Theory of Moral Sentiments*, there is also a more moderate praise of government,

Some general, and even systematical, idea of the perfection of policy and law, may no doubt be necessary for directing the views of the statesman. (Smith, 1759, part VI, sec. II, ch. II, § 18, and p. 234 in Liberty Classics' edition)

This differs with Smith's *Lecture On Jurisprudence* only three years later, where he most emphatically advocates governmental non-intervention (Cf. Smith, 1762).

Edward Earle argues that Adam Smith, Alexander Hamilton and Friedrich List's policies only can be understood "within the framework of their times" regarding British hegemony following centuries of Mercantilist policies,

It was against the background of mercantilism and of a triumphant England that Smith the Briton, Hamilton the American, and List the German outlined economic and political policies for their respective countries. What they had to say concerning the economic foundations of military power can be understood only within the framework of their times and the spirit and special conditions of their respective countries. (Earle, 1943b, p. 120)

Earle argues as List, that Smith's policies did not differ much from power-orientation of Mercantilism,

Smith's most trenchant criticisms of mercantilism were directed at its monetary theories ...

Despite the fact that *The Wealth of Nations* became the bible, and Adam Smith the intellectual progenitor, of the laissez-faire school of nineteenth-century British economic theorists, the truth is that Adam Smith did not really repudiate certain fundamentals of mercantilist doctrine. He rejected some of its means, but he accepted at least one of its ends—the necessity of state intervention in economic matters insofar as it might be essential to the military power of the nation. His followers were more doctrinaire free traders than Smith was himself, and they certainly were more ardent pacifists. (Earle, 1943b, p. 121)

In addition, as Edward Earle writes, the real test as to the relation to power and in Britain's geographical case is therefore naval affairs,

where Smith explicitly aims to give Britain a monopoly on her own trade,<sup>452</sup>

For these reasons the real test of Adam Smith's view on mercantilism and power politics was his stand on the Navigation Acts and the fisheries. "The defense of Great Britain," he said, "depends very much upon the number of its sailors and shipping. The act of navigation, therefore, very properly endeavours to give the sailors and shipping of Great Britain the monopoly of the trade of their own country." (Earle, 1943b, p. 122, referring to Smith, 1776, Book 4, Ch. 2, section 24)

Like Friedrich List before him, Edward Earle argues that although Smith was a free trader in theory, the crucial test is whether "the economic power of the nation should be cultivated and used as an instrument of statecraft",

Adam Smith was a free trader by sincere conviction. He completely demolished some of the theories that underlay mercantilism; and mercantilist practices, as they existed in the British Empire of his day, were repugnant to him. He was suspicious of state interference with private initiative, and he was no worshiper of state power for its own sake. But the critical question in determining his relationship to the mercantilist school is not whether its fiscal and trade theories were sound or unsound but whether, when necessary, the economic power of the nation should be cultivated and used as an instrument of statecraft. The answer of Adam Smith to this question would clearly be "Yes"—that economic power should be so used.

This has not been altogether understood. Smith's followers, particularly in nineteenth-century England, were responsible for presenting him as an uncompromising free trader. Some of his critics, particularly the Germans Schmoller and List, allowed cries of "free trade" to drown out the rest of Smith's teachings which would have been music to their ears. (Earle, 1943b, p. 121)

Earle's criticism is not entirely correct since, as we have seen above, List indeed notices Smith's Mercantilist tendencies.

As noticed above, markets for public goods are a responsibility of the macro agent - the government. As Adam Smith agreed in principle, defence is such a market. As a firm believer in the public good of defence and therefore an admirer of military activity, Smith writes that,

The art of war is certainly the noblest of all arts. (Smith, 1776, book V, Ch. II, Part I)

The same insight that List claimed, that "power is more important than wealth", was also Smith's reason for hailing the British Act of Navigation of 1651: Although it injured commerce (in the short term), it strengthened the navy,

---

<sup>452</sup> Cf. the section above, *England's geographical position*.

The Act of Navigation is not favourable to foreign commerce ... As defence, however, is of much more importance than opulence, the act of navigation is, perhaps, the wisest of all commercial regulations of England. (Smith, 1776, book IV, ch. II, § 30, p. 464-465 in the Liberty Classics edition)

Accordingly, Smith also promoted bounties on export of strategic products, such as gunpowder, in order to promote the domestic productive power and thereby strengthen domestic military power. (Smith, 1776, IV, v.a. p. 36)

This insight into the nature of power was also Smith's reason for applauding the very protectionist British Act of Navigation, 1651, since it injured commerce (in the short term) but strengthened the navy (Smith, 1776, bk. IV, ch. ii).

This act shut out Dutch ships from British commerce, and occasioned an Anglo-Dutch war (1653) which almost decided upon the winner in the battle for world hegemony, at the time and the centuries to come: Government and protection was good for England (Cf. List, 1837a, pp. 132-134).

List points out that the protectionist English 'Act of Navigation' of 1651 built on the model of Venetian and Hanse protectionist laws. Smith defended the Act of Navigation, as List also points out (see below) but for martial reasons and not for commercial reasons,<sup>453</sup>

Adam Smith, when he maintains that the Navigation Laws have not been beneficial to England in commercial respects, admits that, in any case, these laws have increased her power. And power is more important than wealth. That is indeed the fact. Power is more important than wealth. And why? Simply because national power is a dynamic force by which new productive resources are opened out, and because the forces of production are the tree on which wealth grows, and because the tree which bears the fruit is of greater value than the fruit itself. Power is of more importance than wealth because a nation, by means of power, is enabled not only to open up new productive sources, but to maintain itself in possession of former and of recently acquired wealth, and because the reverse of power -- namely, feebleness -- leads to the relinquishment of all that we possess, not of acquired wealth alone, but of our powers of production, of our civilisation, of our freedom, nay, even of our national independence, into the hands of those who surpass us in might, as is abundantly attested by the history of the Italian republics, of the Hanseatic League, of the Belgians, the Dutch, the Spaniards, and the Portuguese. (List, 1841a, p. 46)

The British Act of Navigation 'accidentally' promoted British manufacture and power in the long run and led to the Anglo-Dutch wars,

---

<sup>453</sup> As an indication of how much List stressed this point, he mentions "power" on four times as many occasions throughout his *National System* than Smith in his *Wealth of Nations* (355/174 in a book half as long).



which started the year after in 1652. The eventual English victory cemented English sea power and world domination, later perpetuated by the United States.

### **7.07 Contradiction between free trade theory and British practice**

List repeatedly points out the contradiction between the theoretical claims for free trade and Britain's successful practice with protection. Simultaneously List praises the honesty of Adam Smith, regarding the British conscious suppression of American manufacture. For other nations than Britain Smith advised otherwise, and this led economists of the American System and like-minded to assert that Smith's system was meant only for export,

The North American colonies were kept, in respect of trade and industry, in such complete thralldom by the mother country, that no sort of manufacture was permitted to them beyond domestic manufacture and the ordinary handicrafts. So late as the year 1750 a hat manufactory in the State of Massachusetts created so great sensation and jealousy in Parliament, that it declared all kinds of manufactories to be 'common nuisances,' not excepting iron works, notwithstanding that the country possessed in the greatest abundance all the requisite materials for the manufacture of iron. Even more recently, namely, in 1770, the great Chatham, made uneasy by the first manufacturing attempts of the New Englanders, declared that the colonies should not be permitted to manufacture so much as a horseshoe nail.

To Adam Smith belongs the merit of having first pointed out the injustice of this policy.

The monopoly of all manufacturing industry by the mother country was one of the chief causes of the American Revolution; the tea duty merely afforded an opportunity for its outbreak. (List, 1841a, pp. 94-95)

List mocks academic economists, i.e. Smith, for their inability to see the roots of national wealth, believing that England became prosperous in spite of her commercial policy. The comment parallels comments concerning economic policy in Southeast Asia, being a free-trade experience. They apparently prospered in the period 1960-1997, and prosper again today, in spite of and not because of their economic policy.<sup>454</sup> List commented Smith's claims such,

ADAM SMITH and his disciples have repeatedly asserted that England's commercial policy has not been responsible for her recent prosperity. They argue that England became prosperous in spite of her commercial policy. Our own arguments would fall to the ground if this were true. We believe that we can reveal Adam Smith's errors. We consider that Adam Smith's biographer was right in complaining that this profound thinker was prone to make paradoxical assertions.

---

<sup>454</sup> The typical example is the World Bank report, *The East Asian Miracle. Economic Growth and Public Policy* (IBRD, 1993).

Before the twelfth century England was a very poor and primitive agricultural country. ... (List, 1837a, p. 128)

Similarly in 1841, List mocks the economists of the radical free trade school; ‘the theorists’,

The theorists have since contended that England has attained to wealth and power not by means of, but in spite of, her commercial policy. (List, 1841a, ch. 4: *The English*, p. 40)

In the Introduction to his *National System*, List argues that

The ruling theory, on the contrary, founded by Adam Smith on the dreams of Quesnay, ... is forced even to deny the influence of the English Navigation Acts, the Methuen Treaty, and English commercial policy in general, and to maintain a view entirely contrary to truth that England has reached wealth and power not by means, but in spite of, its commercial policy. (List, 1841b, *Introduction*, in Hirst, 1909, pp. 292-293)<sup>455</sup>

List claims that the policy of keeping the American people down would force them into the interior,<sup>456</sup>

If a power existed that cherished the project of keeping down the rise of the American people and bringing them under subjection to itself industrially, commercially, or politically, it could only succeed in its aim by trying to depopulate the Atlantic states of the Union and driving all increase of population, capital, and intellectual power into the interior. (List, 1841a, p. 103)

Concerning government trade policies in general, and not specifically related to Great Britain, List explains the reasons for the “great gulf which separates their words from their deeds” as a result of conflicting interest and shortage of time,

All governments are under conflicting pressures from these opposing interests. On the one hand, they may favour greater freedom of trade yet at the same time, they will realise the necessity of preserving and protecting existing interests to avoid any violent convulsion, which might endanger the finances, credit or security of the state.

However enthusiastically they may pay lip service to the profundity of the doctrine of free trade, all governments recognise that it is much easier to declare their determination to establish free trade than it is to adopt a policy that will overcome all the difficulties and will achieve the object that they have in mind. They have neither the time nor the desire to make a detailed examination of the doctrine of free trade and they are continually distracted by the demands of various pressure groups and by the actual situation in which the country finds itself. Faced with such an awkward and embar-

---

<sup>455</sup> This quotation has also been used more extensively in the section, *Differentiate future from present*, in chapter 3.

<sup>456</sup> This also happened as a result of the British policy in South Africa at the same time – when the Boers departed into the interior during the 1830s.

rassing situation it is quite natural that governments should take the easiest course open to them to surmount the difficulties with which they are beset. This accounts for the great gulf which separates their words from their deeds. (List, 1837a, p. 23)

List describes the English strategy as cunning and hypocritical and as ‘preaching free trade while doing the opposite’, in order to dominate other countries and “reduce them to a condition of slavery”,

In England, where the free trade doctrine was born and received the greatest support, a recent attempt to put the theory into practice failed. ... it was decided to leave things as they were. ...

What did the great champions of free trade - men like Canning and Huskisson - ever do ...

These men actually proclaimed that they had taken a great step forward towards free trade. But their hypocrisy was obvious since their true purpose was simply to trick those countries into making tariff concessions on the English goods which they imported. ...

Sensible impartial observers have to admit that although England preaches free trade, she practises something very different. ...

There is therefore a real danger that the strongest nations will use the motto “Free Trade” as an excuse to adopt a policy which will certainly enable them to dominate the trade and industry of weaker countries and reduce them to a condition of slavery.<sup>457</sup> ... (List, 1837a, pp. 24-25)<sup>458</sup>

List continues by arguing that free trade is beneficial for a country’s internal trade but dangerous for its external trade, leaving a country vulnerable and exposed to interests abroad; and ultimately slavery,

Inside a country the policy of free trade is beneficial ... But free trade in foreign commerce is far from beneficial. Indeed it is the equivalent of commercial slavery. ... - if introduced unilaterally - permits foreign competitors to ruin native industry while denying to native manufacturers the right to compete on equal terms with foreign rivals in markets abroad. Such “freedom” leaves us to the tender mercies of foreigners. (List, 1837a, p. 25)

## 7.08 England’s strategy of confusion

List regarded Smith’s errors in trade theory as being a calculated mistake in order to confuse potential followers of Great Britain into another

---

<sup>457</sup> 1. Montesquieu in his *Esprit des Lois* writes: “Free trade is not a licence granted to merchants to do as they please. It is a servitude imposed upon them. If the state imposes restrictions upon the individual merchant, it does so in the interest of commerce in general. Trade is never subjected to greater restrictions than in free nations, and it is never subjected to fewer restrictions than in nations under despotic governments.” And again: “England restricts the individual merchant but promotes commerce in general.” [List’s note]

<sup>458</sup> A more complete quotation is found in Appendix 1c.

path than the one chosen by her earlier in history and to considerable degree followed by her at his time as well.

In his *Outlines*, List compares these only apparently well founded “castles in the air” to the hypothetical situation where Napoleon would ask his enemies to give up their armies and fleets (Cf. List, 1827b, Letter I and III). List pointed out in particular the teachings of Adam Smith as a strategy designed to confuse and distract potential followers,

...his system, considered as a whole, is so confused and distracted, as if the principal aim of his books were not to enlighten nations, but to confuse them for the benefit of his own country. (List, 1927-1936, Vol.2 1930, p. 160, i.e. his ‘Philadelphia Speech’)

List writes the English only started to favour free trade after the fall of Napoleon, and only when this would promote their export,

With the fall of Napoleon, English competition, which had been till then restricted to a contraband trade, recovered its footing on the continents of Europe and America. Now for the first time the English were heard to condemn protection and to eulogise Adam Smith’s doctrine of free trade, a doctrine which heretofore those practical islanders considered as suited only to an ideal state of Utopian perfection. But an impartial, critical observer might easily discern the entire absence of mere sentimental motives of philanthropy in this conversion, for only when increased facilities for the exportation of English goods to the continents of Europe and America were in question were cosmopolitan arguments resorted to; (List, 1841a, pp. 73-74)

List writes that the cosmopolitical theories were designed to conceal the true policy of England,

In Adam Smith’s time, a new maxim was for the first time added to those which we have above stated, namely, to conceal the true policy of England under the cosmopolitical expressions and arguments which Adam Smith had discovered, in order to induce foreign nations not to imitate that policy. (List, 1841a, p. 368)

Nations pursue policies in reality and as a stage-play for the audience, and England would thereby be kicking away the ladder she herself had used to achieve greatness, and it was William Pitt the Elder (1708-1778), who designed this clever strategy. List writes,

It is a very common clever device that when anyone has attained the summit of greatness, he kicks away the ladder by which he has climbed up, in order to deprive others of the means of climbing up after him. In this lies the secret of the cosmopolitical doctrine of Adam Smith, and of the cosmopolitical tendencies of his great contemporary William Pitt, and of all his successors in the British Government administrations.

Any nation which by means of protective duties and restrictions on navigation has raised her manufacturing power and her navigation to such a degree of development that no other nation can sustain free competition

with her, can do nothing wiser than to throw away these ladders of her greatness, to preach to other nations the benefits of free trade, and to declare in penitent tones that she has hitherto wandered in the paths of error, and has now for the first time succeeded in discovering the truth.

William Pitt was the first English statesman who clearly perceived in what way the cosmopolitical theory of Adam Smith could be properly made use of,...

... By nature he said France was adapted for agriculture and the production of wine, as England was thus adapted to manufacturing production. These nations ought to act towards one another just as two great merchants would do who carry on different branches of trade and who reciprocally enrich one another by the exchange of goods.<sup>459</sup> Not a word here of the old maxim of England, that a nation can only attain to the highest degree of wealth and power in her foreign trade by the exchange of manufactured products against agricultural products and raw materials. This maxim was then, and has remained since, an English State secret; it was never again openly professed, but was all the more persistently followed. (List, 1841a, pp. 368-9)

In addition, as we see in List's footnote, Pitt emerges as the probable originator of the theory of comparative advantages. It was therefore not Ricardo, as is often claimed, nor Adam Smith, who developed this theory of absolute advantages.

## **7.09 England's strategy of domination**

List's insistent and repeated criticism of cynical British power policies towards its emerging competitor states should not make us forget that Britain was his model country, both regarding its civilized liberal political regime at home and in its imperial strength.

Nevertheless, List argues that England desired to monopolise the world's manufacturing power and keep the rest of the world in vassalage,

English national economy has for its object to manufacture for the whole world, to monopolize all manufacturing power, even at the expense of the lives of its citizens, to keep the world and especially her colonies in a state of infancy and vassalage by political management as well as by the superiority of her capital, her skill and her navy. (List, 1827b, Letter II)

List was not at all blind to England's accomplishments, but he questioned the legitimacy of erecting an English global empire on the ruin of all other nations,

---

<sup>459</sup> 2 France, said Pitt, has advantages above England in respect of climate and other natural gifts, and therefore excels England in its raw produce; on the other hand, England has the advantage over France in its artificial products. .... This is a reciprocal condition and a basis on which an advantageous commercial treaty between both nations should be founded. ... (List's Footnote)

Who can tell how far behind the world might yet remain if no England had ever existed? And if she now ceased to exist, who can estimate how far the human race might retrograde? Let us then congratulate ourselves on the immense progress of that nation, and wish her prosperity for all future time. But ought we on that account also to wish that she may erect a universal dominion on the ruins of the other nationalities? Nothing but unfathomable cosmopolitanism or shopkeepers' narrow-mindedness can give an assenting answer to that question. (List, 1841a, p. 366)

List notices the tendency of English trade treaties, which were designed to extend the sale of her own manufacturing products and ruin the native manufacturing power of other countries,

We thus find that in all treaties of commerce concluded by the English, there is a tendency to extend the sale of their manufactures throughout all the countries with whom they negotiate, by offering them apparent advantages in respect of agricultural produce and raw materials. Everywhere their efforts are directed to ruining the native manufacturing power of those countries by means of cheaper goods and long credits. If they cannot obtain low tariffs, then they devote their exertions to defrauding the custom-houses, and to organising a wholesale system of contraband trade. The former device, as we have seen, succeeded in Portugal, the latter in Spain. (List, 1841a, pp. 66-67)

According to Prof. Helmut Diwald, Chancellor Bismarck later said about Great Britain that,

The English are filled with irritation and envy, that we have fought great battles - and won. They do not welcome the rise of the little "ruppigen" Preussen. The view of the British gentry is that this is a people, which only exists to wage wars for payment. They never wished us well, and always harmed us according to ability. (Diwald, 1980, p. 378)

## **7.10 Combating Britain's monopolies and unfair treaties**

List claimed that Britain had already established monopoly in many trades, by technical skill and indeed with skilful treatises (Cf. List, 1841a, pp. 60-67 regarding Portugal and List, 1841a pp. 94-95, regarding North America).

List explains that immediate free trade would lead to the universal monopoly of the already established and strongest nation,

... under the existing conditions of the world, the result of general free trade would not be a universal republic, but, on the contrary, a universal subjection of the less advanced nations to the supremacy of the predominant manufacturing, commercial, and naval power, is a conclusion for which the reasons are very strong and, according to our views, irrefragable. (List, 1841a, p. 126)

The Methuen Treaty of 1703 allowed English manufactured products into Portugal while allowing wine into England. It ruined Portuguese industry, and made Portugal and her colonies into de facto colonies of Great Britain, but relieving Britain from the administrative toil. The treaty became a template for Britain's later commercial treaties, and Adam Smith set up a theory to legitimise them, the theory of absolute trade advantages. Accordingly, Adam Smith claimed that the treaty gave no special advantages to Great Britain,

The yearly exports of England to Portugal exceed the imports from that country by the amount of one million sterling. This favourable balance of trade lowered the rate of exchange to the extent of fifteen per cent to the disadvantage of Portugal....

All the merchants and political economists, as well as all the statesmen of England, have ever since eulogised this treaty as the masterpiece of English commercial policy. ...

For Adam Smith alone it was reserved to set up a theory directly opposed to this unanimous verdict, and to maintain that the Methuen Treaty had in no respect proved a special boon to British commerce.

Were not the Portuguese cloth manufactories totally ruined, to the advantage of the English? Did not all the Portuguese colonies, especially the rich one of Brazil, by this means become practically English colonies? Certainly this treaty conferred a privilege upon Portugal, but only in name; whereas it conferred a privilege upon the English in its actual operation and effects. A like tendency underlies all subsequent treaties of commerce negotiated by the English. By profession they were always cosmopolites and philanthropists, while in their aims and endeavours they were always monopolists.

According to Adam Smith's second argument, the English gained no particular advantages from this treaty, (List, 1841a, pp. 61-63)

### **7.11 Combatting Britain's monopoly trade with colonies**

Some know that List advocated freedom of trade and freedom of the seas, but normally forget that he did so in particular regarding an opening up of trade with Britain's colonies. Britain kept the trade with her colonies behind a curtain of 'preferential trade', in other words a system of self-supporting protectionism, from the very first days of colonialism to the very last days of colonialism.

List claimed that opening up trade with Britain's colonies and renouncing her sea power, would also benefit England itself, as well as be of mutual benefit,

It might, at first sight, appear to be asking too much to expect England to open her colonies to the commerce of all nations and to renounce the advantages to be gained by using her sea power to force distant backward

countries ... but would confer upon England greater advantages than upon anyone else. (List, 1837a, p. 49)<sup>460</sup>

Whereas the British conception and policy of 'The Free Seas'<sup>461</sup> in List opinion indicated free seas for the British, List promoted free seas for all countries.

List returns to the problem of Britain's mercantilist and protectionist policy later in his *Natural System*, and advocates collaboration, first through a congress, to force England to accept free trade and international law. He then correctly prophesies that the same problems will arise when the USA will dominate the world. List therefore advises England to prepare for this situation by sharing the position with other industrial nations,

It is obvious that the United States is developing into a maritime power which before long will inevitably surpass that of England. ... . England would in these circumstances be well advised to give up voluntarily a supremacy that cannot in any case survive for very long. (List, 1837a, pp. 48-51)<sup>462</sup>

## 7.12 British strategists substantiate List's claims

List's ideas were influential beyond Germany and the USA, for instance in the British Empire through e.g. Joseph Chamberlain; Sir Alfred Milner; and his 'organisational heir' Sir Leo Amery. As we shall see below, British strategists agree that England had built her wealth on protection and had tried to trick her competitors into believing otherwise.

In addition, the influential Joseph Chamberlain<sup>463</sup> criticised the liberal policy of A. Smith and Richard Cobden. He claimed it had tripped up Britain more than its international competitors had, since they realised what Britain was planning. André Maurois describes Chamberlain's campaign and quotes him,

The Colonial Secretary started an oratorical campaign in the country, in which he displayed such strength and irony and forthright eloquence that

---

<sup>460</sup> This quotation has also been used in the section below; *Common interest in free trade*, where the subject of mutual benefits from free trade is discussed further.

<sup>461</sup> *Mare Liberum* or *The Freedom of the Sea* was written by Hugo Grotius (1583-1645), who claimed that the sea was international territory and therefore all nations were free to use it for trade. Grotius wrote as a counsel to the Dutch East India Company and argued against the Portuguese claim of monopoly on the East Indian Trade through the 'Mare Clausum' policy.

<sup>462</sup> This quotation has also been used in the section below; *Common interest in free trade*, where the subject of mutual benefits from free trade is discussed further.

<sup>463</sup> British Secretary of Trade, then Secretary of Colonial Affairs and in general a crucial person in British strategic affairs at the turn of the 20<sup>th</sup> Century.



his opponents, so confident to start with, began to take fright. ... Chamberlain's arguments were simple. To strike at the Free Trade religion he first scrutinized its prophet. Richard Cobden had been a worthy man, but examined in the light of the pasty fifty years his prophecies had all proved wrong.

...  
“Mr. Cobden based his whole argument upon the assumption that he made in good faith that if we adopted free trade it would mean free exchange between the nations of the world; that if we adopted free trade, five years, ten years would not pass without all other nations adopting a similar system. That was his belief, and upon the promise - the prediction - which he offered, the country adopted free trade. Unfortunately he was mistaken. He told the people of his day that what he wanted to do was to keep England as the workshop of the world, and the rest of the world was to be the wheatfield of England. I came across a passage in Mr. Morley's 'Life of Cobden' the other day which really now, when you think of what has actually happened, seems to be almost astounding. Mr. Cobden said that the United States of America, if free trade were adopted, would abandon their premature manufactures. That workmen in their factories would go back to the land. Mind, now I am quoting his exact words, 'They would dig, delve, and plough for us.' If that had been true, I doubt whether I should have been here tonight; but it was not true. The Americans have not so conceived their national destiny. They have not believed that they were created by Providence in order to 'dig, delve, and plough for us.' They have thought that they have natural resources even greater than our own. They have thought that they could manufacture as well as us, and I am afraid that their ideas of the future have been much more correct than Mr. Cobden's.” (Maurois, 1933, pp. 128-129)<sup>464</sup>

While having the prominent position of 'Secretary of Colonial Affairs', Chamberlain appealed to his countrymen for their solidarity with British subject in the Colonies by granting them 'preference'. In *King Edward and his Times*, André Maurois writes and quotes Chamberlain,

... After the conclusion of peace he had himself gone out to South Africa. Returning in May, 1903, he brought back an Imperialist programme. ...

“You are Englishmen, you are Scotsmen, you are Welshmen, but you are no longer the inhabitants of a small island. You are an Imperial race. In every clime you have brothers of your breed and blood. These brothers are only asking to tighten their links with you. ... Let Empire products enter England freely; tax those of other countries. That will enable you to obtain a more favourable treatment for your own goods, and above all to strengthen the bonds that unite all the Dominions and Colonies to England.” (Maurois, 1933, pp.127-128)

In a speech in 1907, published in *Constructive Imperialism*, Milner<sup>465</sup> argues in a Listian spirit for a pragmatic trade policy under the guiding star of benefits for the home producer,

---

<sup>464</sup> List comments upon this hypocritical British policy e.g. in his *The Natural System* .... (List, 1837a, pp. 24) quoted here in e.g. Appendix 1d.

<sup>465</sup> The German born and educated Milner, a Fabian Socialist, was perhaps

... there is an increasing invasion of our markets by goods from abroad which we used to produce ourselves, and an increasing tendency to exclude our goods from foreign markets. The Tariff Reform movement is the inevitable result of these altered circumstances ....

This country became one of the greatest and wealthiest in the world under a system of rigid Protection. It has enjoyed great, though by no means unbroken, prosperity under Free Trade. Side by side with that system of ours other countries have prospered even more under quite different systems. These facts alone are sufficient to justify the critical spirit, which is the spirit of the Tariff Reformer. He does not believe in any absolute right or wrong in such a matter as the imposition of duties upon imports. Such duties cannot, he thinks, be judged by one single test, namely, whether they do or do not favour the home producer, and be condemned out of hand if they do favour him. (Milner, 1907, *Tariff Reform*)

In *The Fundamental Fallacies of Free Trade*, the leading British strategist Leo Amery<sup>466</sup> describes the positive results of Bismarck and List's policies as evidenced by the growth in population,

... the dense populations of the towns and industrial districts of modern Germany is the direct offspring of Bismarck's policy. ... the emigration from Germany was enormous. Since the economic development of Germany ... the position has changed entirely as regards the birth-rate ... Germany nowadays actually has an excess of immigrants. ... Cologne. The inhabitants of that city, and of many another German city, are the children of Bismarck's statesmanship, the grandchildren of List's far-seeing genius. Would a purely agricultural Germany be capable of supporting her present population, or be growing at the rate of a million souls a year? (Amery, 1906, pp. 34-35)

Amery admitted that free trade was so favourable to Britain that she would have dominated the world, "more powerful than any political empire has ever been" and "The Free Traders of that day fully realised this",

---

the most influential person in the British Empire between 1897 and 1925 - and beyond through his networks; 'Milner's Kindergarten' and 'The Round Table' group.

<sup>466</sup> We can indicate Leo Amery's importance by noting that in 1922 he became member of the Royal *Privy Council* and was appointed *First Lord of the Admiralty*; and was appointed *Colonial Secretary* of the entire British Empire in 1924. He fought for closer economic relations within the Empire and established the *Empire Marketing Board*. Furthermore, and not the least, Leo Amery was the political heir of Alfred Milner, who passed the baton on from Cecil Rhodes, as the foremost promoters of the British Empire on the world stage in this period. He was also one of two main promoters of Winston Churchill as Prime Minister. The other was Duff Cooper, first lord of the admiralty. Their efforts led to the fall of PM Neville Chamberlain in May 1940, and escalated animosities by ending the 'Phony War' against Germany.

Sixty years ago England had a special aptitude or a special advantage in practically every branch of manufacture, more especially in the manufactures that were of most universal use and capable of supporting the largest population. To the England of Cobden's day universal Free Trade would undoubtedly have been an enormous benefit. It would have fastened our economic yoke upon the whole world, and made us the centre of a great trade empire, more powerful than any political empire has ever been. The Free Traders of that day fully realised this. ... the introduction of Free Trade in 1846 may have been well worth the risk; indeed, it may have been a pity that it was not introduced much earlier. But it was a speculation none the less, and it ought to have abandoned as soon as it became clear that the other side was not prepared to take up the offer, say by 1880 at the very latest. (Amery, 1906, pp. 52-53)

### 7.13 British policy after List - the Edwardians

England continued her policy of trade - seemingly and rhetorically 'liberal', for decades after List - and she continued to add vast areas to the British crown (Cf. e.g. Cain and Hopkins, 1993). With time, however, competitors for markets and power, such as the USA, Japan and Russia, but in particular Germany, arose and became the bogeyman and reason for British re-armament especially from the 1890s and onwards. In his *Economic Development of the North Atlantic Community*, Dudley Dillard writes that due to Germany's economic advance in the late 19<sup>th</sup> Century, she took the place of France as Britain's main foe,

Germany's rapid growth towards becoming the leading industrial country in the years between 1870 and 1914 disturbed the political and military balance of power between the European nations. At least from the time of Louis XIV until Napoleon I France had been the most powerful nation in Europe. Great Britain took care of the balance of power both over against Louis XIV and Napoleon's France. By alternately supporting Prussia, Austria and other of the continental rivals of France, the British could hold France in check. By the beginning of the 20 century Germany had taken the place of France as the strongest nation on the continent. In order to uphold the balance of power in Europe the British now allied with France against Germany. (Dillard, 1973, pp. 92-93)

At the turn of the 20<sup>th</sup> Century, there was a heated debate in the British Empire regarding how to deal with the fact that Germany and the USA were overtaking Great Britain.<sup>467</sup> It is interesting to observe that the USA overdid Britain in manufacturing more than Germany, but

---

<sup>467</sup> In this debate Cecil Rhodes' close friend and editor of the London Times, William Stead, promoted an transatlantic 'Sea-powers' alliance between the British Empire and the USA, an effort that was adopted and continued well into WW II and beyond (Cf. Stead, 1899; and Adams, 1900; as well as Amery, 1906; and Williams, 1888 and 1896 - not forgetting Viscount Milner's *Constructive Imperialism*; Milner, 1907)

she was not considered as a major threat. Furthermore, although USA overdid Britain in armament far more than Germany, she was still not considered as a major threat.

André Maurois describes how dissolution with the old Liberal policy led to a search for a new ideology in England, and found it in the Tory social-Imperialism (of Benjamin Disraeli) rejuvenated by Joseph Chamberlain et al, which led to the Anglo-Boer war,

A common platform was not easy to find. Masses are animated and kept moving only by a single faith. And this faith was the Imperialism of Disraeli, rejuvenated by Chamberlain. Why did a policy rejected in 1880 triumph in 1895? Firstly because in political strife defeat is the path to victory. A party in power wears out its strength. ... Those upper classes ... were ... becoming conservative. The Liberal party missed their money bags. ...

The younger intellectuals, thirsting after new ideas, were turning away from doctrines of Liberalism which, though bold in 1830, had a outworn look in 1880. They were soon to turn either to Fabian socialism or to Tory democracy. And finally the halfpenny Press ... called for great events. "What sells a newspaper?" ...

"The first answer is War. ... Imperialism ... won over the Press as it won over the brewers.

But a policy of self-interest, pride and spectacles would not have sufficed to attract the English voter. ... Imperialism could only if it became what Gladstone's pacifism had formerly been, a moral movement. But the difficulty of synthesizing conquest and duty had by then been realized by some great spiritual chemists. Cecil Rhodes, the Napoleon of South Africa, believed in the heaven-sent mission of the British race. ... Kipling was the poet of this religion. ... He sang the duty of taking up the White Man's Burden, ... Throughout the world as in Palmerstone's time, British interests were protected with acerbity and a disdainful superiority. And such an attitude was fatally bound to lead to conflict when some other race was brought to stand up against this intrinsic will. The South African War was the natural outcome of Chamberlain's politics." (Maurois, 1933, pp. 82-84)

The (fifth) Anglo-Boer war 1899-1902,<sup>468</sup> (often called 'The Second South African War'), made a huge impression on the world and on the

---

<sup>468</sup> In order to pressure the sovereign Zuid-Afrikaansche Republiek into submission (aka the Transvaal Republic, today a region in South Africa), London e.g. in 1895 "first" tried to stage a fake rebellion from within; then she tried encirclement and trade blockade, but neither worked (Cf. van Zyl, 1981, p. 312). When it finally came to full blown war, London sent in 450 000 well equipped soldiers from all over the Empire to quell about 90 000 Boer commandos - mainly with rifles on horseback, and in fighting age between 13 and 65. Statistics are unreliable but fighting and disease probably claimed some 24,000 British lives; 12,000 African lives; and 7.000 Afrikaners. (

Furthermore General Kitchener, introduced 'methods of barbarism': The British Empire fought the guerilla and the rest of the population by building a fortified wall right across the land; scorching the land; burning farms and villages; killing the life-stock; as well as poisoning wells and salting fields. A quarter of the population, some 118.000 women and children were imprisoned in 'concen-

British Empire. France and Russia even asked Germany to join them in an intervention to support the Boers, but interestingly Germany turned it down and this saved England (Cf. Aall, 1939, Ch. 25). In effect, Germany 'sacrificed' the Boers in order to please London, it seemed - and in vain: The German Emperor was also able to play it cynical - and intricate. As the Russian PM Sergei Witte recounts in his *Memoirs*: Germany set the Boers up, in order to distract and weaken England, as Germany tried with Russia in the East,<sup>469</sup>

... it had been the intention of German diplomacy and of the German Emperor himself to drag us, by hook or crook, into Far-Eastern adventures, so as to divert our forces to the East and leave them a free hand in Europe. It may properly be mentioned here that Emperor William is also partly to blame for the Boer War. He ostentatiously encouraged President Krüger to refuse England's demands, sending him a most demonstrative and provocative telegram. Of course, when the war broke out, he discreetly withdrew into the background. As a result, the Republic of the Transvaal was destroyed and England considerably weakened for the time being. For those who worship nationalism in the extreme Emperor William is an ideal example of an eminent ruler. He stops at nothing to benefit the country and the people he governs. (Witte, 1921, pp. 411-412)

Eventually London won the South African War, but the poor British performance<sup>470</sup> as against a band of poorly equipped farmers made

---

tration camps, deliberately under miserable conditions in order to pressure the combatting men into surrender; Starvation, measles and typhus etc. killed app. 28 000 of the captives, a culling rate of some 25 %. In addition, app. 25 000 prisoners of war were sent to 'concentration camps' abroad, and 115.000 Africans were interned in local concentration camps. Whole regions were depopulated and a 65 % majority of the dead Afrikaners were children. (Cf. e.g. de Kock, 1981. *The Anglo-Boer War*, 1899-1902, pp. 350, 353, 356 and 360; Pakenham, *The Boer War*, 1979: the Epilogue 'Winners and Losers', p. 572 ff)

In a speech on July 25, 1900, the future PM of Great Britain, Lloyd George said: "A war of annexation, however, against a proud people must be a war of extermination, and that is unfortunately what it seems we are committing ourselves to ..." (Gilbert, 1987, p. 183)

<sup>469</sup> A parallel is how the Western powers incited and set up Poland in 1939, described by the British military strategist Liddell Hart in his classic, *History of the Second World War* (Cf. Hart, 1970, pp. 10-13), in order to trigger a war with Germany; make Germany focus eastwards; resulting in a clash with Russia and weakening them both.

<sup>470</sup> Thomas Pakenham describes the British humiliation in his classic *The Boer War*, and begins the *Introduction* in this way, "The war declared by the Boers on 11 October 1899 gave the British, in Kipling's famous phrase, 'no end of a lesson'. The British public expected it to be over by Christmas. It proved to be the longest (two and three-quarter years), the costliest (over £200 million), the bloodiest (at least twenty-two thousand British, twenty-five thousand Boer and twelve thousand African lives) and the most humiliating war for Britain between 1815 and 1914." (Pakenham, 1979, *Introduction*)

London realise that she was hardly fit to tackle a modern industrial contender, like Germany. Bernard Semmel writes,

It was a time of crisis, a period of domestic violence (suffragette, Orangeman, syndicalist), and of heightening fears of Imperial Germany. (Semmel, 1960, p. 244)

In her article *The Character of Edwardian Nationalism*, Ann Summers describes the media hype and scare,<sup>471</sup>

The number and frequency of invasion scares in the Edwardian period seem barely credible to us today, and some contemporaries were also highly suspicious of them. James Anson Farrer, a member of the Anglican Peace League and an unremitting opponent of the National Service League, wrote in 1909:<sup>21</sup>

‘An ‘ignominious panic of invasion’ is the only chance that Jingoism has for inducing us to surrender our liberty at the dictation of the restless ambitions of our military advisers, who wish to see us cut a figure in the future wars of the Continent.’ (Summers, 1981, p.75, footnote omitted)

Research in how this media scare came about has brought many interesting links to the contemporary military complex.<sup>472</sup>

A fitting metaphor might be to say that the British Empire acted like a tiger forced into a corner; the South African experience to an extraordinarily degree moulded the British elite and shaped its view of the situation regarding the prospects of the British Empire, both concerning a) Socio-political affairs; b) Strategic and military affairs; and c) Economic affairs.

#### **a) Socio-political affairs;**

In the period after the major crash in 1873 until 1932, Great Britain found herself gradually in the process of being overtaken industrially, by initially less advanced- and protectionist countries.

Several social movements<sup>473</sup> reacted to this development, and promoted change in the hitherto liberal policy (domestically and regarding foreign trade). They saw this as a needed remedy, to preserve the glory of the Empire, as well as Industry and employment, and the welfare of the common people. Their mutual main agenda seem to have consisted

---

<sup>471</sup> She thus reminds us of similar policies recently, if one substitutes ‘terrorism’ for ‘invasion’.

<sup>472</sup> Cf. e.g. Morris, *The Scaremongers; The Advocacy of War and Rearmament 1896-1914*, 1984 and Pugh, *The Cost of Sea Power. The Influence of Money on Naval Affairs from 1815 to the Present Day*, 1986

<sup>473</sup> They were; various Social- Imperial movements; National Efficiency movements; Tariff Reform movements; the English Historical School in economics; and even the Labour elite groups: *The Fabian Society* and *The Coefficient Club*. (Cf. Semmel, 1960; *Imperialism and Social Reform: English Social-Imperial Thought 1895-1914*).

in two intertwined goals, serving each other: Preserving the Empire, securing, and lifting the social position of the working class.

The core political themes of the period were:

- 1) Explicit emulation of Bismarck's German tariff union (disagreement).
- 2) "Breeding an Imperial Race" fit to rule the Empire (agreement).
  - a) Explicit emulation of Bismarck's social reform (disagreement on how to finance it).
  - b) Eugenics - or 'racial cleaning' – permeating all political parties: Liberals, Conservatives and Socialists alike, except the Cobdenites.<sup>474</sup>

At the turn of the 20<sup>th</sup> Century and the most heated debate, there were largely four factions:

1. Working class movement (Labour + the trade unions) vacillated.
2. Anti-imperialists (The Liberal Party's "Radicals", i.e. 'Cobdenites') were free traders.
3. Imperial-Liberals (The Liberal Party's 'Imperial' faction) were free traders.
4. Imperial-Unionists (Tory, Conservative Party's majority) were protectionists.<sup>475</sup>

The protectionist group argued for 'imperial preference', explicitly modelled on the German 'Zollverein'. By stressing the common fate of the nation, the movements served to prepare the way for Corporatism; as with post-WW I Fascism; and with post-WW II Social-Democracy. Almost all promoted the breeding of an 'Imperial Race' and many saw elitist rule as fit to repair the dwindling powers of the Empire. Therefore, all the elements of Fascism were vividly present on England's political scene before WW I, but historians most often pass by this inconvenient cultural-political phenomenon.<sup>476</sup>

According to Bernard Semmel, *Imperialism and Social Reform: English Social-Imperial Thought 1895-1914* there was unanimous support for

---

<sup>474</sup> The eugenics tradition goes at least back to the academic tradition from the 1850s of Charles Darwin, Francis Galton and Herbert Spencer, and most likely far further back in order to legitimise e.g. the old slave trade that finally was forbidden in 1807 and the colonial empire. The Cobdenites were the 'Radicals' (Liberalists), as opposed to the Liberal-Imperialists within the Liberal Party.

<sup>475</sup> It was strengthened when Joseph Chamberlain brought in the Unionist faction of the Liberal Party in 1895. The term 'Unionist' refers to the preference for a continued union with Ireland.

<sup>476</sup> It is nevertheless described in e.g. *The Crisis of Liberalism: New Issues of Democracy* (Cf. Hobson, 1909), on a larger cultural canvas in *The Strange Death of Liberal England* (Cf. Dangerfield, 1936); and in *The Origins of the Lloyd George Coalition: The Politics of Social-Imperialism 1900-1918* (Cf. Scally, 1975).

‘Social-Darwinism’ of two kinds, one for domestic use and one for Imperial use, Internal - and External Darwinism, as Semmel calls them.

As a part of his passion for ‘national efficiency’, Francis Galton and his student Karl Pearson claimed state responsibility for creating a race fit for imperial endeavours, “a race fit to rule” (Cf. Semmel, 1960; and also Searle, 1971; and Searle, 1976).<sup>477</sup> This entailed imperial expansion and the “duty to civilise” less developed nations.<sup>478</sup>

## **b) Strategic and military affairs**

London prepared herself for the upstart militarily, by a radical transformation of the complete military system, starting in earnest in 1902 after the coronation of King Edward VII. His personal adjutant, Sir John Fisher, was appointed First Sea Lord in 1904 and immediately introduced the so-called ‘Naval revolution’. In 1904 Lord Fisher favoured larger battle ships and their location in the North Sea, since he saw the Baltic as Germany’s weak flank. Fisher planned to force through the Danish sounds followed by a landing in (German) Pomerania and a forced march 150 km south to Berlin, accompanied by the Russians. Fisher describes a,

... landing 90 miles from Berlin on that 14 miles of sandy beach in Pommerania impossible of defence against a battle fleet ... (Fisher, 1919a, p. 212)

In 1905, Berlin watched the emerging British strategy with nervousness and worries, since it could ram them in their heart, and threaten them with a blockade. Therefore, also Germany continued its naval ar-

---

<sup>477</sup> ‘Internal Darwinism’ was a matter of achieving a sound stock of people, especially the working class, fit to fight for Imperial glory. The scientific method of the day for the breeding of an Imperial Race came under the name of Eugenics, which caught the minds of broad parts of the people like religion.

‘External Darwinism’ was a matter of viewing the British people as fit to rule the conquered territories with their manifold races scattered around the world. In this way, External Darwinism to some extent was dependent upon the success of Internal Darwinism. So, being an adherent of one kind of Darwinism did in no way preclude adherence to the other kind of Darwinism.

According to Semmel, early external Darwinists included Conservative thinkers like T. Carlyle, B. Kidd, C. Kingsley (all critical of “inferior races”, and many of the below e.g. Spencer and Ruskin), and Liberal thinkers like H. Spencer, C. Dickens and J. Ruskin. Internal Darwinists included Liberal thinkers like John Stuart Mill, H. Spencer, T. Huxley, Bright and C. Darwin. Social Darwinism also had its devoted supporters among the Socialists such as the Fabians, and the leading persons were H. G. Wells, G. B. Shaw, S. Webb and often forgotten: W. Hewins and H. Mackinder (Cf. Semmel, 1960 and Searle, 1971 and 1976).

<sup>478</sup> In a Norman tradition that started with the “civilising” efforts in “barbarian” Ireland, in 1169 AD, designed to bring the ‘heretic’ Irish Church under the control of the *Holy Sea* of Rome.



mament. But according to Heinz Neukrichen's *Seemacht im Spiegel der Geschichte* ('Naval Power in the Mirror of History'), the German navy in 1906 was little in comparison with the later adversaries in WW I, and amounted to 12,5 % of their naval forces taken all together. Therefore, the German navy hardly constituted a threat (Cf. Neukirchen, 1982, p. 314). Nevertheless, as Lord Fisher wrote, there was still reason to cull newcomers,

I approached His Majesty and quoted certain sayings of Mr. Pitt about dealing with the probable enemy before he got too strong. It is admitted that it was not quite a gentlemanly sort of thing for Nelson to go and destroy the Danish fleet at Copenhagen without notice, but — it seemed to me simply a sagacious act on England's to seize the German Fleet when it was so very easy of accomplishment in the manner I sketched out to his Majesty. ... (Fisher, 1919a, p. 18)

According to Theodore Ropp's *War in the Modern World*, the encirclement of Germany also took place at sea, and existing British forces were relocated thanks to a row of new treaties around the world, with Japan, France and the USA,

As might have been predicted from a really careful study of British history, Britain had met the threat by agreements with her other rivals which enabled her to concentrate against Germany. (Ropp, 1959, p.195)

First Sea Lord Fisher continues,

All were against me in 1904, ... — when the navy was turned inside out — ships, officers, men. A New Heaven and a New Earth! 160 ships put on the scrap. - They squirmed when I concentrated 88% of the British Fleet in the North Sea, ... And they squirmed me now when I say at one stroke the war could be ended. It could be! (Fisher, 1919a, p. 36)<sup>479</sup>

Lord Fisher writes that the goal was to enter the Baltic (and Germany),

Mr. Churchill was behind ... the Baltic project, and also in his belief that the decisive theatre of the war was beyond doubt in Northern waters; and both he and Mr. Lloyd George, the chancellor of the Exchequer, magnificently responded to the idea of constructing a great Armada ... (Fisher, 1919a, p. 55)

I remember that at the War Council held on January 28<sup>th</sup> 1915 11.30 a.m. Mr. Churchill announced, that the real purpose of the Navy was to obtain access to the Baltic, ... the *third* phase was the clearing of the Baltic. Mr. Churchill laid stress on the importance of this latter operation, because

---

<sup>479</sup> Discussed at length by the Ambassador Einar Maseng, in his *Perspective on the foreign policy of the North-European countries in the last centuries*, 1972, Vol. III, Ch. 6.

Germany always had been and still was very much afraid of being attacked in the Baltic. (Fisher, 1919a, p. 56)

Great Britain countered the efforts towards a Scandinavian pact of neutrality since this would hinder their access to the Baltic and Germany and the supporting use of Norwegian ports as well as increase the resistance to the unpopular British blockade policy. Great Britain also counteracted 'Nordismen' or 'Scandinavism' (Scandinavian co-operation efforts) and also encouraged the Danes to refuse Germany's suggestion in 1864 regarding a split of the German Duchy of Schleswig<sup>480</sup> along the language barrier, in order to counteract the unification of the German speaking peoples into Germany. Furthermore, London encouraged Sweden to resist Norwegian demands for independent representation abroad, thus fuelling Norwegian demand for complete independence. Thereby London could gain full control over German access to the North Sea. (Cf. Maseng, 1972, Vol. III, Ch. 2). The topping of the Nordic cake came when the Danish Prince Frederick, whose highest wish it was to become a British naval officer, was selected to be King Haakon VII of Norway and married to King Edward VII's daughter Princess Maud.

### **c) Economic affairs**

The crucial political issue around the turn of the 20<sup>th</sup> Century was how to win votes from the Labour movement, through promises of employment, wages, and social reforms. The major economic debate was over trade policy and its effect on employment etc. Eventually the Imperial-Liberal group, had won by 1908 with the support of Labour, and managed to implement major social reforms explicitly modelled on Bismarck's reforms, along with imperial expansion and explicit 'jingo' preparations for war with Germany. In a nutshell, it seems as if Labour was 'bought' off by the City. The factor that continuously split the Social Imperialism movement was the question of tariff policy: "Free" or "fair".

The protectionist wing - the Conservatives and (formerly Liberal) Unionists, who saw Britain's future as the continued workshop of the world - lost out in the election of 1908, against the coalition of the City (the Liberal Imperialists and the Radicals of the Liberal Party) and Labour, seeing the future of Britain as a financial and logistic hub. However, the same coalition invited the protectionists into the core of power, as an elitist agreement within the 'Governing Group'. (Cf. Semmel, 1960, p. 231 ff)

In sharp contrast to the tradition developed by Leibniz, List and the American System who all hailed the strategy of the *Harmony of Interests*, the predominant tradition among the elite in England - a more

---

<sup>480</sup> The German Duchy of Schleswig was ruled by the Danish King, due to his parallel position as Duke of Schleswig.

brutish tradition of Malthusian-Darwinistic mode of thought<sup>481</sup> - contributed to British neo-Mercantilism before and after WW I.

Gustav Schmoller commented, concerning the Edwardian period after 1903 and concerning Joseph Chamberlain's policy, that violence took the place of honest competition in trade policy, leading to WW I,

... a brutal imperialism of conquests and alliances took the place of the conservative Chamberlainian imperialism with the solution: Germaniam esse delendam.<sup>482</sup> It is the Great British policy which had to lead to the world war in 1914. It is the retreat into mercantilist policy of violence of the 17. and 18. Century. One intends to remove the unpleasant competition by violence and destruction instead of through better ships and goods.

It is the politics which as a consequence likewise has prevented the idea of a trade league in Middle-Europe, ... a most mutually favouring customs union which would reach from Belgium through Germany to the Persian Gulf. (Schmoller, 1900-1919, vol. II, p. 734)

In spite of his great efforts, 'Red Joe' Chamberlain did not succeed in turning around the trade policy of the British Empire. The adoption of protection by influential persons of the British Empire did not succeed totally, since this faction lost when the tariff debate culminated in 1903 with the Commonwealth Tariff Conference. Eventually protection was adopted, so-called *Imperial Preference* policy, at the Imperial Conference in 1932 in Ottawa, Canada, and through the efforts of Joseph Chamberlain's son, Neville Chamberlain.

This system of 'preferential trade' was dismantled only after US President Franklin D. Roosevelt's Lend-Lease terms were agreed to by (the half-American) British Prime Minister Winston Churchill in 1941. Michael Hudson describes the process in the chapter, *Lend Lease and Fracturing of the British Empire*, 1941-45. Hudson begins the chapter with a quotation,

Along with its immediate purpose, lend-lease had from the beginning an important postwar aspect. . . . Lend-lease was a successful case of postwar planning in wartime. – Council on Foreign Relations, *The United States in World Affairs*, 1945-47 (New York: 1947), p. 344. (Quoted in Hudson, 2003, ch.4, p. 119)

The unravelling of the British Empire's preferential system finally allowed the US to fulfil her long-run dream of free access to the British colonial markets for US industry. With some reason, we may therefore say that it was Britain's closest friend that killed the British Empire, for the American companies, in a classic trade war - mercantilist style.

Roosevelt thereby dissolved the preferential trade system of the British Empire, just as List had called for, but Roosevelt also placed the US

---

<sup>481</sup> Cf. the section *Reductionism and consequences – a contrast*, in chapter 3.

<sup>482</sup> Meaning, 'Germany is to be destroyed'. This is close to Emperor Cato's claim that 'Carthago nihil esset'. (My comment)

in Britain's former dominant position, precisely as List had warned about.

### **7.14 German awakening**

Commenting upon Dr. John Bowring's Report on the German Zollverein to Lord Viscount Palmerston, 1840, and the English proposals for a trade agreement with Germany, List wrote that England planned to destroy German industry and reduce Germany to an agricultural colony of England,

It is therefore no exaggeration if we maintain that the tendency of the English proposals aims at nothing but the overthrow of the entire German protective system, in order to reduce Germany to the position of an English agricultural colony. (List, 1841a, p. 402)

List claimed that the Britons treated the Germans worse than they treated a conquered people,

Nevertheless the all-monopolising islanders would not even grant to the poor Germans what they conceded to the conquered Hindoos, viz. to pay for the manufactured goods which they required by agricultural produce. In vain did the Germans humble themselves to the position of hewers of wood and drawers of water for the Britons. The latter treated them worse than a subject people. Nations, like individuals, if they at first only permit themselves to be ill-treated by one, soon become scorned by all, and finally become an object of derision to the very children. (List, 1841a, p. 398)

List writes that at first the Prussian bureaucracy and universities were taken by Smith's theory, but the reality of industrial distress changed the opinion,

... the Prussian customs tariff had undergone many changes in the direction of absolute free trade, and no longer afforded any sufficient protection against English competition. At the same time the Prussian bureaucracy long strove against the country's cry for help. They had become too strongly imbued with Adam Smith's theory at the universities to discern the want of the times with sufficient promptness. There even still existed political economists in Prussia who harboured the bold design of reviving the long-exploded 'physiocratic' system. Meanwhile the nature of things here too proved a mightier force than the power of theories. The cry of distress raised by the manufacturers, hailing as it did from districts still yearning after their former state of connection with France, whose sympathies it was necessary to conciliate, could not be safely disregarded too long. (List, 1841a, p. 86)

List explains how German belief in the cosmopolitan system, was beginning to wane, and how instead trust in common sense gained the ground,

... people in Germany have ceased to indulge in cosmopolitical dreams. People here now think for themselves—they trust their own conclusions, their own experience, their own sound common sense, more than one-sided systems which are opposed to all experience. They begin to comprehend why it was that Burke declared in confidence to Adam Smith ‘that a nation must not be governed according to cosmopolitical systems, but according to knowledge of their special national interests acquired by deep research.’ People in Germany distrust counsellors who blow both cold and hot out of the same mouth. People know also how to estimate at their proper value the interests and the advice of those who are our industrial competitors. Finally, people in Germany bear in mind as often as English offers are under discussion the well-known proverb of the presents offered by the Danaidae.<sup>483</sup> (List, 1841a, p. 397)

List continues by writing that a popular opinion gained weight, that the English strategy was to undermine the wealth and power not only of North America and Germany, but also of the whole European Continent by stifling the baby in the cradle, and two Parliament speeches in London added weight to this new German opinion,

More and more the opinion spread at the time that the English Government were favouring in an unprecedented manner a scheme for glutting the markets on the Continent with manufactured goods in order to stifle the Continental manufactures in the cradle. This idea has been ridiculed, but it was natural enough that it should prevail, first, because this glutting really took place in such a manner as though it had been deliberately planned; and, secondly, because a celebrated member of Parliament, Mr Henry Brougham (afterwards Lord Brougham), had openly said, in 1815, ‘that it was well worth while to incur a loss on the exportation of English manufactures in order to stifle in the cradle the foreign manufactures.’ This idea of this lord, since so renowned as a philanthropist, cosmopolist, and Liberal, was repeated ten years later almost in the same words by Mr Hume, a member of Parliament not less distinguished for liberalism, when he expressed a wish that ‘Continental manufactures might be nipped in the bud.’ (List, 1841a, pp. 86-87)<sup>484</sup>

## **7.15 Essential requirements for a sovereign nation**

List describes a European dilemma, and argues that the political division of Europe is suboptimal for the development of the individual nations, that conquest by force is unsound policy, but at present a just and wise division is unrealistic,

---

<sup>483</sup> The Danaidae were the fifty daughters offered by King Danaus of Egypt to his nephews. They all but one killed their husbands. (My note)

<sup>484</sup> Lord Brougham’s speech in the House of Commons is printed in full in *The Edinburgh Review* (Brougham, 1816, p. 264).

As yet, the apportionment of territory to the European nations does not correspond to the nature of things. ... If every nation was already in possession of the territory which is necessary for its internal development, and for the maintenance of its political, industrial, and commercial independence, then every conquest of territory would be contrary to sound policy, ... A just and wise apportionment of territory is, however, at this day not to be thought of... (List, 1841a, pp. 410-411)

List's argument was that small nations can only manage well in periods of peace and as long as they do not threaten the interest of larger nations, i.e. they will manage as long they serve as client states of the larger nations. Smaller countries wanting to defend their interests had only one option and that was to change the borders. In modern and more humane times, they could unite themselves freely by their own will (Cf. List, 1841a, pp. 175-177, see quotation below).

This has been happening all over the world, most notably now in Europe, as it happened in the US two centuries earlier on. A part of this strategy was international trade agreements prepared through international conferences on trade, the details of which he spelled out.

List's description of the relation between the Netherlands and Germany touches upon his ideas of the prerequisites of a sovereign and therefore viable nation, in the sense that it would be sufficiently self-sustained to withstand any kind of outside attack, an old political goal of Mercantilism - also of the British Empire. List argues e.g. that small states cannot fully develop all necessary industrial branches to the extent that they possess effective and requisite internal competition,

A large population, and an extensive territory endowed with manifold national resources, are essential requirements of the normal nationality ... A nation restricted ... can only possess a crippled literature, crippled institutions for promoting art and science. A small state can never bring to complete perfection within its territory the various branches of production. In it all protection becomes mere private monopoly. Only through alliances with more powerful nations, by partly sacrificing the advantages of nationality, and by excessive energy, can it maintain with difficulty its independence.

A nation which possesses no coasts, mercantile marine, or naval power, or has not under its dominion and control the mouths of the rivers, is in its foreign commerce dependent on other countries; ...<sup>485</sup>

A nation not bounded by seas and chains of mountains lies open to attack of foreign nations, and can only by great sacrifices, and in any case only very imperfectly, establish and maintain a separate tariff system of its own.

Territorial deficiencies of the nation can be remedied either by means of hereditary succession ... purchase ... or by conquests ...

---

<sup>485</sup> This situation appeared as a result of royal succession in the Habsburg Empire and the Netherlands thus came under Spanish rule. It was thereby split away from the traditional area of the first German Empire, never to return. Germany thereby lost control over a considerable part of its coastline and also lost control over its main internal transport artery, the Rhine River. (My note)

In modern times a fourth means has been adopted, which leads to this object in a manner much more in accordance with justice and with the prosperity of nations than conquest, and which is not so dependent on accidents as hereditary succession, namely, the union of the interests of various States by means of free conventions.

By its Zollverein, the German nation first obtained one of the important attributes of its nationality. But this measure cannot be considered complete so long as it does not extend over the whole coast, from the mouth of the Rhine to the frontier of Poland, including Holland and Denmark. A natural consequence of this union must be the admission of both these countries into the German Bund, and consequently into the German nationality, whereby the latter will at once attain what it is now in need of, namely, fisheries and naval power, maritime commerce and colonies. Besides, both these countries belong, as respects their descent and whole character, to the German nationality. The burden of debt with which they are oppressed is merely a consequence of their unnatural endeavours to maintain themselves as independent nationalities, and it is in the nature of things that this evil should rise to a point when it will become intolerable to those two nations themselves, and when incorporation with a larger nationality must seem desirable and necessary to them.

Belgium can only remedy by means of confederation with a neighbouring larger federation her needs which are inseparable from her restricted territory and population. (List, 1841a, pp. 175-177)

Gipson writes that the core of British imperial economic policy was self-containment,

It should be understood that fundamentally the elaborate system of economic controls that were supposed to bind the British Empire in 1763 was in essence not only a protectionist system but one designed to make the Empire as nearly as possible economically self-contained. (Gipson, 1954, p. 25)

This indicates that the trade policy of British mercantilism was the model both for the American System as well as for List's Industrial system, as List himself clearly argues. This also indicates a break in British policy, which actually came with the free trade policy of Britain's Prime Minister Gladstone after 1852. This lasted a few decades, until Joseph Chamberlain et al tried to return to the old Mercantilist principles, at the turn of the 20<sup>th</sup> Century.

When Germany (and other before her) tried to copy Great Britain's success, a clash was inevitable. List's idea of a viable sovereign state included construction of a navy, able to defend its overseas trade and ports from attacks and blockades. Cain and Hopkins quote the very influential Viscount Esher's reaction to the moderate German navy plans at the end of the 19<sup>th</sup> Century, where he pointed to Germany as Great Britain's natural enemy,

"Germany is going to contest with us the Command of the Sea, and our commercial position. She wants sea power and the carrying trade of the world. Her geographical grievance has got to be redressed. She must obtain

control of the ports at the mouths of the great rivers which tap the middle of Europe. She must get a coastline from which she can draw sailors to her fleets, naval and mercantile. She must have an outlet for her teeming population, and vast acres where Germans can live and remain Germans. These acres only exist within the confines of our empire. Therefore, "L'Ennemi c'est L'Allemagne."<sup>486</sup> (Cain and Hopkins, 1993, vol. I, p. 456)

Furthermore, Germany's strength seemed to constitute the largest threat to Britain for one century,

Indeed, the extent of Germany's economic power, its overseas ramifications and the apparent attempt to combine her formidable military strength with a navy as powerful as Britain's, were felt to be a threat greater than anything Britain had faced in over a century. (Cain and Hopkins, 1993, vol. I, p. 458)

### **7.16 Access to sea, navies and blockades**

List saw lost opportunities in the past for German splendour and power. After the Netherlands and thereby the mouth of the main transport artery for Germans, the Rhine River, was parted from the Austrian Habsburg empire, the German-speaking territories no longer possessed the necessary requirements for a sovereign nation, since the access to sea was no longer secured. The Habsburg Charles V, Holy Roman Emperor (1500-1588) spoiled this opportunity for German greatness,

Had Charles V. cast away from him the crown of Spain as a man casts away a burdensome stone which threatens to drag him down a precipice, how different would have been the destiny of the Dutch and the German peoples! As Ruler of the United Netherlands, as Emperor of Germany, and as Head of the Reformation, Charles possessed all the requisite means, both material and intellectual, for establishing the mightiest industrial and commercial empire, the greatest military and naval power which had ever existed—a maritime power which would have united under one flag all the shipping from Dunkirk as far as Riga.

The conception of but one idea, the exercise of but one man's will, were all that were needed to have raised Germany to the position of the wealthiest and mightiest empire in the world, to have extended her manufacturing and commercial supremacy over every quarter of the globe, and probably to have maintained it thus for many centuries.

Charles V. and his morose son followed the exactly opposite policy. (List, 1841a, p. 31)

List frequently refers to various barriers to free trade such as the English blockade against Hamburg and Bremen (Cf. List, 1841a, p. 389) in order to prove that without a navy there is no free and stable

---

21. M.V. Brett, ed. *Journals and Letters of Reginald Viscount Esher* (1934), II, p.267, quoted in Court, *British Economic History*, p. 471. (footnote by Cain and Hopkins)



trade for the merchant, no security nor prosperity for the citizens of Germany. Of course, this kind of policy was old within the state mercantilist tradition. Since other nations could not be trusted, the mother country and colonies would form an autarchy. Colonies were part and parcel of this strategy since these would supply the mother country with raw materials and markets for manufactured products. Cardinal Richelieu and then Colbert<sup>487</sup> were feverish in their ambitions to construct fortified ports, a French merchant fleet and above all a navy that could match the British, as had Charles V, all with poor results, though. The later American ambitions on this area were more successful in overcoming the British resistance mainly due to 1) the successful unification of a greater nation – a whole continent – as a parallel to the British overtaking of the Dutch city states, and 2) the imitation of British(-Dutch-Venetian) economic policy.

In the early seventeenth century-France, Richelieu used the Venetian system of taxation (Cf. Palm, 1922, p. 79) and navy construction as a model for France in order to beat them in their own game, economic expansion and further to establish a strong nation-state, creating a take-off in science later continued with the policies of Colbert. As the Venetian educated Flemish mercantilist Usselincx, Richelieu intended to build a navy for the purpose of depriving Spain of its hegemony of the seas. In addition, Colbert later desired to deprive England of its dominance of the colonial trade and pirating business.

Richelieu and later Colbert regarded a strong navy as the key to prosperity, as they both envied Holland of her position. The Dutch and among others the Venetians, strongly resented the pursuits of a strong French navy (Cf. Palm, 1922, pp. 149-150). Concerning similar later attempts by Colbert, Paul Kennedy writes,

“The only parallel”, notes Professor Jones “is the similar work of Tirpitz in the years before 1914” - and the reaction on this side of the Channel was similar in both cases.<sup>488</sup> (Kennedy, 1976, p. 73)

By constructing a German navy, the international “security market” or “power market” might become less dominated by the contemporary monopolist, Britain. This would allow for greater competition and efficiency in many other markets. A central part of the strategy of relieving Britain of her monopoly position would logically have to include the admission of the regions bordering the North Sea into the German customs union. The reason was getting free access for German goods through the mouth of the river Rhine (controlled by the Dutch), and the mouths of the rivers Elbe and Weser (blocked by the English through the occupation of Heligoland – parallel to the 205 year long Dutch blockade of Antwerp). Another reason was getting free access for inland

---

<sup>487</sup> Chief ministers of the French kings Louis XIII, and Louis XIV respectively.

<sup>488</sup> J.R. Jones: *Britain and Europe in the Seventeenth Century*, London 1966, p. 55 (Kennedy’s note)

German goods through the ports of the ports of Belgium, the Netherlands and the Hanse towns, who so far had taxed these goods heavily. It also called for the inclusion of Denmark into the customs union in order to have free passage between the North Sea and the Baltic Sea through Oeresund (or the inclusion of Holstein in order to build the Kiel Canal, which was Bismarck's compromise). List wrote,

... the German protective system only accomplices its object in a very imperfect manner, so long as Germany does not spin for herself the cotton ... : so long as she possesses no perfect system of transport by river, canal, or railway: so long as the German Zollverein does not include all German maritime territories and also Holland and Belgium. (List, 1841a, p. 426)

England has shown the world how powerful is the effect of facilities of transport in increasing the powers of production, and thereby increasing the wealth, the population, and the political power of a nation. (List, 1841a, p. 49)

### **7.17 Railroads and the balance between Land- and Sea powers**

England as an island and coastal nation depended on maritime transport inland and offshore. From the 17<sup>th</sup> Century, she increased this dependence by gradually increasing her dependence on overseas colonies for supplies and markets for her products, and gradually established superiority on the seas. Any nation that established marine activity, and even more so a navy, would per definition potentially threaten England's supply lines. Moreover, any nation that established a productive power potentially large enough to potentially create a navy, would also be regarded as a threat, especially if in her neighbourhood.

Infrastructure is obviously a tool of great importance for an economy. Without transport, no market - from the local farmer and his village - to the global network container ships and harbours. By being a precondition for markets, infrastructure is a vital part of a nation's productive force and power. Militarily too, logistics is a vital part of any war effort.

As long as any Continental nation mainly depended on maritime transport, she was under the sway of England's dominance at sea. However, with the invention of effective land based transport, the situation changed dramatically.

Palmer and Colton indicate the immense role of the invention of railways. Concerning Napoleon's Continental System and blockade against Britain, they write,

One obstacle was transportation. Much trading between parts of the Continent had always been done by sea: this coastal traffic was now blocked by the British. Land routes were increasingly used, ... But land transport, at best, was no substitute for the sea. Without railroads, introduced some thirty years later, a purely Continental economy was impossible to maintain.

Another obstacle was tariffs. (Palmer and Colton, 1995, p. 434)

Railroad construction not only made a local economy function more efficiently, it also would make military mobility more efficient. Thereby land-powers would more strongly challenge the monopoly and upper hand sea-powers had so far in history (Cf. List, 1837a, p. 51; 1837b, p. 135, org.pag. pp. 25-25a.)

List's opinions in this matter, regarding the changed position of Germany, from being the battlefield of Europe to becoming the fortress of Europe, was later adopted by one of his students, the central British geopolitician Halford Mackinder (Mackinder, 1904), regarding Britain's historical prime enemy, Russia.

Edward Earle argues that List's contribution regarding the strategic importance of railways is remarkable, explaining how it could totally transform Germany's position in Europe,

The greatest single contribution that List made to modern strategy was his elaborate discussion of the influence of railways upon the shifting balance of military power. ...

His interest in the economic effects of railways was to be expected, although he was much more foresighted than most of his contemporaries. But his understanding of the strategic implications to Germany of steam transportation is surprising and by any objective standards quite remarkable. ... List saw sooner than anyone else that the railway would make the geographical situation of Germany a source of great strength, instead of one of the primary causes of its military weakness. With political unification fortified by a nation-wide link of railway communications, Germany could be made into a defensive bastion in the very heart of Europe. ... and thus prevent the recurrent invasions that had been going on for over two hundred years. ... When it is considered that all of the foregoing was written before the American Civil War gave the first definitive proof of the military value of railways, it shows truly remarkable prescience. (Earle, 1943b, pp. 148-151)

One might disagree slightly with Earle in this, and add that List's elaboration of how to promote the productive powers surpassed his forerunners and was of a far more profound nature than List's insight into "railway strategy".

In *Makers of Modern Strategy: Military Thought from Machiavelli to Hitler*, Edward Earle writes that List's memorandum on the issue of an Anglo-German alliance,

... reveals an acute appreciation of some of the strategic realities facing both countries in the middle of the nineteenth century. To begin with, List foresaw what Sir Halford Mackinder was to elucidate more than half a century later, that there was nothing eternal about British maritime supremacy. The development of steam railways and steam navigation, he thought, might give the Continental powers advantages in relation to the British ... (Earle, 1943b. p. 148)

Edward Earle writes that List suggested that mutual benefits might arrive from the construction of a railway link to Asia,

In his project for an Anglo-German alliance he proposed that British communications with India and the Far East should be improved by railway lines extending from the English Channel to the Arabian Sea. (Earle, 1943b. p. 151)

Nevertheless, the construction of the Berlin-Baghdad railway added to the geopolitical challenge for Britain, of which the result was, according to some, WW I with WW II as an appendix through the Treaty of Versailles.

Several British historians therefore counter the point of view on the peace-creating ability of infrastructure and therefore, indirectly, of free trade. The British military historian, Sir Michael Howard, claimed in the summer of 1993 (lecture in the Ditchley Foundation), that the German railroad construction brought about two world wars, and that new civilian technology may provoke new wars in the future,

... the growth of railways (in particular) created a new major political and economic power in the centre of Europe which was to shatter the international system with a new series of wars - wars that began with the Prussian challenge to the Austrian Empire in 1866 and did not really conclude until the defeat and destruction of Nazi Germany in 1945. It would be an extraordinarily rash person who asserted today that similar economic and technological changes will not sooner or later transform the underlying power-structure of the world in a way that may have to be tested - as it has always been tested in the past - by military conflict. This is, alas, a long-term possibility that cannot be lost to sight. (Howard, 1993)

Also the British historian, Peter Hopkirk, claims that WW I was a result of the German railroad project Berlin-Baghdad, which was created out of the ideas of "the first German imperialist", the economist Friedrich List. (Cf. Hopkirk, 1994)

Mackinder wrote on this theme the same year List was republished in London, and one year after the opening of the Trans-Siberian railroad, which List in principle had suggested in 1841 (Cf. List, 1841a, ch. 9, p. 93),

The Russian railways have a clear run of 6000 miles from Wirballen in the west to Vladivostok in the east. The Russian army in Manchuria is as significant evidence of mobile land-power as the British army in South Africa was of sea power. True that the Trans-Siberian railway is still a single and precarious line of communication, but the century will not be old before all Asia is covered with railways. The spaces within the Russian Empire and Mongolia are so vast, and their potentials in population, wheat, cotton, fuel and metals so incalculably great, that it is inevitable that a vast economic world, more or less apart, will there develop inaccessible to oceanic commerce. ...

... Russia replaces the Mongol Empire. ... The oversetting of balance in favour of the pivot state, resulting in its expansion over the marginal lands of Euro-Asia, would permit of the use of vast continental resources for fleet-building, and the empire of the world would be in sight. This might happen if Germany were to ally herself with Russia. ...

In conclusion, it may be well expressly to point out that the substitution of some new control of the inland area for that of Russia would not tend to reduce the geographical significance of the pivot position. Were the Chinese, for instance, organised by the Japanese, to overthrow the Russian Empire and conquer its territory, they might constitute the yellow peril to the world's freedom just because they would add an oceanic frontage to the resources of the great continent, an advantage as yet denied to the Russian tenant of the pivot region. (Mackinder, 1904, pp.260-264)

The construction of the Trans-Siberian railroad was an achievement of immense importance strategically, regarding trade and power, threatening British control over Indian and Eurasian trade (Cf. the so-called Great Game between Russia and Great Britain, in the 19<sup>th</sup> century).

Preceding the achievement of the Eurasian railroads, the Trans-Siberian- and the Berlin-to-Bombay, and of equal importance in this correction of geo-political 'market failures', was the construction of the American Trans-Continental railways during the civil war, forging the US northern states into an effective challenger of British world hegemony, the ally of the US southern states.<sup>489</sup>

US President Abraham Lincoln, precisely for this reason sent his best expert and civil engineer, General Grenville M. Dodge, to help his ally Alexander II in Russia, build the Trans-Siberian based on the experience of the American model of development corridors along transport lines - reaping the benefits of an "artificial" high level of population density. - As well as sending Erasmus Peshine Smith, the modern founder of Economics of Energy, or Physical Economics, to Japan for the same strategic reason: Challenging the British hegemony.

## **7.18 'Independent vassalage' and tropical colonies**

An ironic argument that List makes, is to advice England's trading partners to apply for colonial status under England, as they would surely be better treated and protected as English subjects, than when sabotaged and fought against as foes. He ironically suggests this for Portugal, Germany, Europe and points to all the advantages that India has gained,

Do not we see what Portugal would have gained if she had been governed since the Methuen Treaty by an English viceroy—if England had transplanted her laws and her national spirit to Portugal, and taken that country (like the East Indian Empire) altogether under her wings? Do not we per-

---

<sup>489</sup> Russia had helped the northern states in the US civil war by breaking the British blockade on her ports and trade.

ceive how advantageous such a condition would be to Germany—to the whole European continent?

India, it is true, has lost her manufacturing power to England, but has she not gained considerably in her internal agricultural production and in the exportation of her agricultural products? Have not the former wars under her Nabobs ceased? Are not the native Indian princes and kings extremely well off? Have they not preserved their large private revenues? Do not they find themselves thereby completely relieved of the weighty cares of government (List, 1841a, pp. 290-291)<sup>490</sup>

And List ironically suggest that also the USA might benefit from returning to the status of colonies in the British Empire,

..., it may be urged against us that it would be incomparably more to the advantage of the United States if they returned again to the position of an English colony. To this we answer, yes, provided always that the United States do not know how to utilise their national independence so as to cultivate and develop a national industry of their own, and a self-supporting system of commerce and credit which is independent of the world outside. (List, 1841a, p. 289)

List then answers; yes, the USA would do better if they had no ambitions for their nation. Furthermore, as colonies the problem would remain, because the colonists have no insurance that the mother country will continue to treat them well as colonies. Independence and self-determination of a sovereign nation is the only durable solution and insurance of national wealth.

### **7.19 Colonies, division of labour and free trade**

When we get to the issue of colonies there might be more substance to criticism of List, since List clearly and explicitly was in favour of acquiring colonies. List's system is on this point somewhat inconsistent, but not totally so, as we shall see at the end of this section, regarding free trade.

First, it is interesting to note that List believed that other nations are capable of raising themselves to the same degree of liberty and development as his model country, England,

It is especially owing to her civil, mental, and religious liberty, to the nature and excellence of her political institutions, that the commercial policy of England has been enabled to make the most of the natural riches of the country, and fully to develop the productive powers of the nation. But who would deny that other nations are capable of raising themselves to the same degree of liberty? (List, 1841a, p. 322)<sup>491</sup>

---

<sup>490</sup> The preceding part of this quotation may be found in chapter 5; in the section, *Balance of trade*

<sup>491</sup> This quotation has also been used in the section *Capital of mind*

Nevertheless, List does not believe that tropical countries are able to industrialise. But List does not disfavour non-Europeans for reasons of ethnicity; in the following quotation List where he makes an argument based on climatic conditions, that disqualifies Texas as fit for industrialisation, a state mainly settled by protestant North-West Europeans,

... Central and South America ...

The above-mentioned countries, including Texas, are for the most part adapted for raising colonial produce. They can and will never make great progress in manufacturing industry. (List, 1841a, p. 432)

Even so, List explicitly notices the contrary facts, that the East was more industrialised than Europe,

Before the discovery of the route round the Cape, the East still far surpassed Europe in manufactures. ... (List, 1841a, p. 263)

Furthermore, List notices that the diligence of the Indians will lead to expansion of production,

It is well known that the Hindoos, owing to great industry and great moderation in their food and other wants, especially in consequence of the precepts of their religion, which forbid the use of animal food, are excessively frugal. To these must be added the want of capital among the natives, the great fruitfulness of the soil in vegetable products, and the restriction of caste and the great competition of those in want of work.

The result of all this is, that wages in India are incomparably lower than in the West Indies and South America, whether the plantations there are cultivated by free blacks or by slaves; that consequently the production of India, after trade has been set free in that country, and wiser principles of administration have prevailed, must increase at an enormous rate, and the time is no longer distant when England will not only be able to supply all her own requirements of colonial produce from India, but also export great quantities to other countries. (List, 1841a, pp. 417)

Still, List does not mention any need for Indian sovereignty. He makes the matter look as if the Indians simply had surrendered by free will, and thus makes it a matter of national will and spirit. There is also no mention of India's repeated riots and protests against English rule. This lenient attitude towards England's colonial behaviour, contrasts with List's strong protests against English unfavourable treatment of her European trading partners.

List's claim that the tropical nations - like Texas - cannot industrialise is thus left hanging, and even more so when we observe their advances in the past decades.

List strongly supports acquiring colonies, for the traditional economic reasons regarding access to raw materials and access to a consuming market for manufactured products, and for civilising reasons.

## a) Natural division of labour

According to List, foreign trade and colonies are a natural consequence of industrialization,

It is from manufactures that the nation's capability originates of carrying on foreign trade with less civilised nations, of increasing its mercantile marine, of establishing a naval power, and by founding colonies, of utilising its surplus population for the further augmentation of the national prosperity and the national power. (List, 1841a, p. 209)

List argues that it was essential that a sovereign nation should acquire colonies, and therefore a merchant fleet to carry on trade with the colonies and an able navy to protect that trade. List argues that colonies were the requirement that, when fulfilled, would complete the sovereign nation,

The highest means of development of the manufacturing power, of the internal and external commerce proceeding from it, of any considerable coast and sea navigation, of extensive sea fisheries, and consequently of a respectable naval power, are colonies.

The mother nation supplies the colonies with manufactured goods, and obtains in return their surplus produce of agricultural products and raw materials; this interchange gives activity to its manufactures, augments thereby its population and the demand for its internal agricultural products, and enlarges its mercantile marine and naval power. The superior power of the mother country in population, capital, and enterprising spirit, obtains through colonisation an advantageous outlet, which is again made good with interest by the fact that a considerable portion of those who have enriched themselves in the colony bring back the capital which they have acquired there, and pour it into the lap of the mother nation, or expend their income in it. (List, 1841a, p. 269)

In his list of activities to be promoted, List mentions that manufactures are to be reserved for the mother country, in a preferential system that in the British Empire lasted until 1941,<sup>492</sup>

To import only raw materials and agricultural products, and to export nothing but manufactured goods.

To direct any surplus of productive power to colonisation, and to the subjection of barbarous nations.

To reserve exclusively to the mother country the supply of the colonies and subject countries with manufactured goods, but in return to receive on preferential terms their raw materials and especially their colonial produce. (List, 1841a, p. 367)<sup>493</sup>

---

<sup>492</sup> When F.D. Roosevelt forced W. Churchill to accept this as a condition for arms support; the Lend-Lease agreement mentioned above, in *British policy after List*.

<sup>493</sup> This quotation has also been used in the section, *English protectionism*



List argues that the division of labour between the mother country and her colonies, is based upon natural causes,

The exchange of manufactured goods for natural products is the fundamental condition on which the position of the present colonies continues. ... But this exchange between the countries of the temperate zone and the countries of the torrid zone is based upon natural causes, and will be so for all time. Hence India has given up her manufacturing power with her independence to England; hence all Asiatic countries of the torrid zone will pass gradually under the dominion of the manufacturing commercial nations of the temperate zone; .. (List, 1841a, p. 270)

List argues that the resources and markets of the East constitute great opportunities for the European nations,

If we reflect on the course which such a regeneration might possibly pursue, the first consideration that strikes one is that the greater part of the East is richly provided by nature with resources for supplying the manufacturing nations of Europe with great quantities of raw materials and necessary articles of every kind, but especially for producing tropical products, and in exchange for these for opening unlimited markets to European manufacturers. (List, 1841a, pp. 419-420)

## **b) Colonial goods as a catalyst for activity**

List maintains that luxury products are necessary, but not in themselves: Because they symbolise social stratification, they act as a source for productive exertion of all individuals. There are many types of luxury goods, some produced domestically and some produced in the tropical colonies.<sup>494</sup> List's argument for the necessity of colonial produce depends on the necessity of these specific luxury products.

List's argument for the necessity of colonial imports is rather advanced. List argues that colonial products have no nutritional value and are goods suited for luxury consumption, such as sugar, tobacco, and spices.

Colonial products, so far as they do not consist of raw materials for manufacturing purposes, evidently act more as stimulants than necessary means of subsistence. No one will deny that barley coffee without sugar is as nutritious as mocha coffee with sugar; and admitting also that these products contain some nutritious matter, their value in this respect is nevertheless so unimportant that they can scarcely be considered as substitutes for native provisions. With regard to spices and tobacco, they are certainly mere stimulants, i.e. they chiefly produce a useful effect on society only so far as they augment the enjoyments of the masses, and incite them to mental and bodily labour. (List, 1841a, p. 305)

---

<sup>494</sup> See also the section, *Consumption and dissatisfaction is key, not saving*, in chapter 3.

List argues that this import employs a great many trades and people in trade, transport and also in manufacturing in order to pay for imports,

The exchange of colonial products for manufactured goods is of manifold use to the productive powers of the countries of the temperate zone. These articles serve either, as e.g. sugar, coffee, tea, tobacco, partly as stimulants to agricultural and manufacturing production, partly as actual means of nourishment; the production of the manufactured goods which are required to pay for the colonial products, occupies a larger number of manufacturers; manufactories and manufacturing business can be conducted on a much larger scale, and consequently more profitably; this commerce, again, employs a larger number of ships, of seamen, and merchants; and through the manifold increase of the population thus occasioned, the demand for native agricultural products is again very greatly increased. (List, 1841a, p. 263)

In this way this “superfluous” taste for colonial produce, acts “as stimulants to agricultural and manufacturing production”, and as stimulants to trade, transport, and the production of such means. The colonial imports thus act as a kick-starter and catalysts for general economic activity. List’s argument for colonial import resembles his argument for the beneficial results from demand for luxury products. This is only natural since colonial import also constituted a kind of luxury products, but of a far grander scale.

However, this ‘necessity’ luxury goods and colonial products is not a matter of what List prefers personally. The ‘necessity’ is a matter of reality; what real people actually think and act according to. It is not likely that a nation like Germany would be able to stem a popular demand for colonial products, since they would be victims to the tight cultural integration of European nations, with Germany surrounded on all borders by nations that would enjoy colonial products.

The problem is, as the spirit in the bottle, once out - you cannot get it back. If e.g. the Germany states had tried to do just this, their borders would have been flooded with contraband, promoting organised crime on a grand scale.

So, in the end, perhaps List *was* right on this point, given the historical and geographical circumstances.

### **c) Benevolent imperialism - Occidental tutelage of the Orient**

In 1827, in *The American Economist*, List promoted a scheme of benevolent imperialism,

It is the task of politics to civilise the barbarous nationalities ... It is the task of national economy to accomplish *the economical development of the nation*, and to prepare it for admission into the universal society of the future. (List, 1827a, p. 175)

Benevolent imperialism has been fashionable during many other occasions in time and space. One remarkable instance was during the descending highlight of the British Empire.<sup>495 496</sup>

In 1841, List deals extensively with the decay of the Orient and the necessity of Occidental tutelage. He blames the decay of nations and empires in Asia and the Middle East on moral corruption,

... it cannot be ignored that the Continental powers have a great national economic interest in common in the Eastern question. ... It is a conclusion long arrived at by all thoughtful men, that a nation so thoroughly undermined in her religious, moral, social, and political foundations as Turkey is, is like a corpse, which may indeed be held up for a time by the support of the living, but must none the less pass into corruption. The case is quite the same with the Persians as with the Turks, with the Chinese and Hindoos and all other Asiatic people. (List, 1841a, p. 419)

List argues that only an infusion of European morals, vitality, and order will put the house in order,

Wherever the mouldering civilisation of Asia comes into contact with the fresh atmosphere of Europe, it falls to atoms; and Europe will sooner or later find herself under the necessity of taking the whole of Asia under her care and tutelage, as already India has been so taken in charge by England. In this utter chaos of countries and peoples there exists no single nationality which is either worthy or capable of maintenance and regeneration. Hence the entire dissolution of the Asiatic nationalities appears to be inevitable, and a regeneration of Asia only possible by means of an infusion of European vital power, by the general introduction of the Christian religion and of European moral laws and order, by European immigration, and the introduction of European systems of government. (List, 1841a, p. 419)

List's Russian "follower", Prime Minister Sergei Witte, installed similar "benevolent" ideas with the Tsar Nikolai II's brother Grand Duke Mikhail; Witte argues for an educating and protective Russian imperialism in the East; "In contrast with the Western powers",

---

<sup>495</sup> Many in British society in the latter part of the 19<sup>th</sup> Century argued for the duty to civilise the world, or in Rudyard Kipling's words: *White Man's Burden*. Some of these promoters were J.R. Seeley, James Anthony Froude, Charles Dilke, John Parkin, and Joseph Chamberlain. Especially John Ruskin at Oxford had an immense influence, for instance on Cecil Rhodes in South Africa, Parkin especially influenced Viscount Alfred Milner. These politicians and writers foresaw the fall of the British Empire unless something drastically was done. Their solution was a new kind of Imperialism that legitimised itself in bringing light to the world, in the robe of British civilisation. (Cf. e.g. Semmel's *Imperialism and Social Reform*, 1960). One might also mention thinkers who inspired the above, such as James Harrington (1611-1677), Thomas Carlyle (1795-1881), and T. H. Green (1836-1882).

<sup>496</sup> See also the section above, *British policy after List*.

Russia's tasks abroad carry not only a pacific but even a highly cultural character in the best sense of the word. In contrast with the Western powers, which aim at economic and frequently even political subjugation of the peoples of the East, Russia's mission in the East must be a protective and educational one. It is Russia's natural task to guard her neighboring Eastern lands which lie in her sphere of influence against the excessive political and colonial claims of the other powers.<sup>28</sup><sup>497</sup> (quoted in Laue, 1963, p.189)

#### **d) Colonial free trade**

List argues that the barbarous nations of the Occident will benefit from free trade and that furthermore also the Europeans mutually will benefit from agreeing on free trade and free seas, without any excluding other Europeans from any Occidental market,

From this circumstance, nature appears to have given an indication that this regeneration, as generally is the case with the civilisation of barbarous peoples, must proceed by the path of free exchange of agricultural produce against manufactured goods. For that reason the principle must be firmly maintained above all by the European nations, that no exclusive commercial privileges must be reserved to any European nation in any part of Asia whatever, and that no nation must be favoured above others there in any degree. (List, 1841a, p. 420)

Given an international setting where nations behaved egotistically, there was no way in getting colonial products except by engaging in the scramble for Africa and other areas.

As List clearly saw that this would lead to conflicts with other industrialised nations, he repeatedly promoted peaceful solutions through free trade and free seas. He argues that all nations, especially England, would gain from universal free trade, especially with raw materials. Free trade would make the global economy more efficient, as indeed was the argument of the radical free traders of the Cosmopolitan School, thus expanding demand for both raw materials and also for advanced manufactured goods (from England). This would eliminate economic reasons for colonies as well as the need for navies to protect overseas trade. The only remaining reason for colonies would then be civilising, and he uses France regarding North Africa and Germany regarding Turkey as examples. Such civilising projects would have the mutual benefit of helping the less developed nations and expanding the world economy to the mutual benefit of all (Cf. List, 1837a, p. 49 and pp. 126-127, and List, 1841a, pp. 422-423).<sup>498</sup>

---

<sup>497</sup> 28 *Ibid.*, p. 203. (Laue's note, referring to Witte, 1912)

<sup>498</sup> This has also been dealt with in this chapter, in the sections, *Combating Britain's monopoly trade with colonies* and *Common interest in free trade*.

## 7.20 List and German policies

There have been many efforts to connect List, and later German economists in “his” tradition, to the later policies under e.g. Chancellor Otto von Bismarck; the start of WW I; the National Socialists; and the start of WW II.

Regarding Bismarck there is some truth to this when it comes to his socio-economic policy, and excepting his military campaigns. Somewhat ironically perhaps, Bismarck opposed the establishment of German tropical colonies. List promoted this for the traditional and normal European reasons; in order to supply Germany with raw materials and markets for industrial goods, in a typical Mercantilist tradition common for all contemporary and major European powers.

Regarding the claims to connect List to the reasons for WW I, and WW II, this would be stretching the facts overly. It is a bit peculiar that so many insist on blaming List for events that happened almost a century after he died, especially so when he held quite contrary opinions on almost all these issues, whether war, expansionism, race, slavery or dictatorships.<sup>499</sup> One exception to this is his views on colonies, where his view may be characterised as ‘benevolent’ imperialism.

If we move to the specific and immediate events that started WW I and WW II - the geo-political theater is so complicated that time and space forbids me from going into this. Nevertheless, I will point out some general developments on crucial areas, related especially to WW I, but also to WW II to the degree that these events are seen as results of a shifting of centres technology and trade wars.

Overall, we may say that List’s program contributed to the development that led to WW I and thereby WW II, at least for the following three reasons. His central ideas concerned customs unions, railroads (infrastructure), and naval construction. These ideas he had in common with the so-called Mercantilist school - with most British politicians (especially before Gladstone), Colbert, and with the modern American System of Political Economy.

The difference between some of the latter and List would be that whereas List expected and supported mutual benefits to accrue from such endeavours, others were less likely to favour the mutual aspect to that of monopoly - of power and wealth. Whereas List favoured mutual human power over nature, others favoured singular power over other peoples.

The first part of List’s program, a customs union, would potentially shut out English goods, thereby threatening British power and welfare.

---

<sup>499</sup> Discussion of List political and pragmatic Liberalism may be found in chapter 6, in the sections, *Law, individual freedom and democracy*, and *A pragmatic social-liberal*. His view on freedom may be found in chapter 2, in the sections *The core of List’s ideas: Freedom*, and in the section, *Industrialisation fosters freedom and a humane civilization*, in chapter 4.

The second part, railroad construction, would create effective markets in countries where there formerly were none, would elevate the productivity of business in these countries, would make army and supply movements within these countries much more efficient, and when laid into underdeveloped areas would open up new markets for the industry attached to this network. This would strengthen the industrial and political competitors of Great Britain. When these “new” areas happened to be adjacent to a British dominated territory, India, which both the Berlin- Baghdad railway and the Trans-Siberian more or less pointed towards: This could easily be seen as a provocation and a direct threat.

The third reason, naval construction, was a direct threat to British naval supremacy and questioned the British tradition of setting the terms in all areas attached to the global seas such as the right to take prize in even neutral ships in times of war. Additionally it challenged British defence of domestic supplies and communication with its overseas territories.<sup>500</sup>

Therefore, all these three part of List’s strategy of developing Germany and the European Continent by copying the British success, contributed to these two wars and others, not at all because List promoted war as such, but rather since their implementation challenged the hegemonist of world power, Great Britain.

Whether List was right or wrong in promoting his ideas is certainly a matter of dispute. Nevertheless, List argues that there never was, nor is, any objective reason why any one nation should monopolise technical and economic progress and thereby dominate world markets single-handedly (Cf. List, 1841a, p. 366).

#### **a) Against racism**

Franz Neumann was the legal adviser to the German Social Democratic Party. In his *Behemoth, The Structure and Practice of National Socialism*, Franz Neumann in 1942 argues that List and *the Katheder Socialists* in *the Historical School* developed an imperial theory “based on German racial superiority”,

The influence of the so called state or Katheder socialists upon the ultimate development of National Socialist racism seems far more important. The writings of Friedrich List and Adolph Wagner clearly show the factors that contributed to the triumph of racial ideas. These men were attempting to counteract socialist theories of class struggle by repudiating liberal political thought and by setting up a state capitalist scheme that would ‘incorporate’ the working classes and imbue the whole people with the spirit of racial superiority... List was thus to the first to develop the theory that Hit-

---

<sup>500</sup> Concerning the Berlin-Baghdad railway or the Haldane Mission of restraining Tirpitz naval construction programme, see e.g. Quigley, 1966, p. 218.

ler brought to full flower ... on the basis of German racial superiority.  
(Neumann, 1942, p. 104-106)

One may defend List against such claims of racial superiority, as with Franz Neumann above, first because there is scant proof of it, and secondly because he spent his whole life in promoting the development of backward countries, thirdly because he repeatedly attacked slavery, fourthly, because he claims that countries with mixed races may be superior.

Nevertheless, he also airs the opinion that the German race (people) has been selected by providence, but is this 'racism' proper? One may claim some ignorance of List concerning his view of the lacking potentials of countries in the 'torrid' (tropical) zone, but this can hardly be construed as racism. This is especially so, since one of his examples, Texas, to a large degree was populated by German Protestants.

List being a child of the philosophical Idealism that dominated contemporary Germany<sup>501</sup>, is also a strong indication of his anti-racist stance: It is logically unlikely that an idealist will claim that matter, or say genetics, dominates spirit - as opposed to the human reductionism practiced by Thomas Malthus and his followers in Great Britain.<sup>502</sup>

List points out that nations of mixed races have "have surpassed all other nations", but he adds the precondition "a crossing of race frequently repeated and comprising the whole nation", indicating a fully integrated nation and community with a shared identity, since this obviously facilitates communication and trust, which takes time,

It is an old observation, that the human race, like the various breeds of animals, is proved mentally and bodily by crossings; ... It is undeniable that the mixing of two quite different races results, almost without exception, in a powerful and fine future progeny; and this observation extends to the mixing of the white race with the black in the third and the fourth generation. This observation seems to confirm more than anything the fact, that those nations which have emanated from a crossing of race frequently repeated and comprising the whole nation, have surpassed all other nations in power and energy of the mind and character, in intelligence, bodily strength, and personal beauty.<sup>503</sup> (List, 1841a, p. 220)

In the footnote of this quotation, List elaborates further,

The advantages of the crossing of race are not only apparent in the mixing of different nations, but also in the mixing of different family stocks in one and the same nation. ... If this is a law of nature, the rise and progress which the cities of the Middle Ages displayed shortly after their foundation,

---

<sup>501</sup> With e.g. Kant, Fichte, Schelling and Hegel, based in the Neo-Platonism of Plato, Bruno, Kepler, Cusa and Leibniz.

<sup>502</sup> Cf. the sections, *Critic of Malthus' materialism; Reductionism and consequences – a contrast*, in chapter 3; and the subsection *Reductionism* in chapter 2.

<sup>503</sup> 2. According to Chardin, .... (List's note)

as well as the energy and fine bodily appearance of the American people, are hence partly explained. (List, 1841a, p. 220n)

In his *Race and Reich: The Story of an Epoch*, Joseph Tenenbaum likewise claims that List was the forerunner of German predatory nationalism and laid the foundation for a racial state,

The tragedy was that Germany was united not by humanitarian or egalitarian slogans, but by the sword of Prussian militarism. The tragedy was the greater in that the German type of predatory nationalism, so successful in the Franco-Prussian war of 1870, became an exportable commodity, ably advertised in the market of ideas. The noble conception of humanitarian nationalism was captured by the unholy forces of reaction and fettered to a tribal totem of Teutonic might. Even political economy was moulded on the German pattern of national egotism, under the cloak of national interests and economic protectionism. Friedrich List was the prophet of the new nationalistic economic system of neo-mercantilism, with tariff barriers erected for the sake of shutting out competition, and striving for national economic self-sufficiency. In his *National System of Political Economy*, List built an economic floor under the pyramid of the future racial state. He envisioned a German Reich, extending from Dunkirk to Riga and from the North Sea to the Adriatic, "safeguarded by a wall of political and economic impregnability." Bismarck's blood and iron nationalism, a predatory bird with the claws of an eagle and the beak of a vulture, was the culmination of these tendencies. (Tenenbaum, 1976, p. 8)

Tenenbaum is right in pointing out that List favoured a unification of the German speaking peoples, but the geographical places he mentions are related to the enlarged customs union he envisioned, and not a part of the nation of Germany that List had hoped for. Tenenbaum could have been granted some credit in that List's use of the phrase "under one flag" invites misunderstanding, but the phrase is taken from a description of what happened in the 16<sup>th</sup> Century,<sup>504</sup> not of what List desired of the future. The allegation of Tenenbaum is a typical example of a quotation out of context.

Tenenbaum is right in pointing out that most of Germany was united by Prussia and under the sword, but this was not the dream of many Germans, especially West-Germans: They preferred more liberal traditions, such as with Hegel and List. And when Tenenbaum claims that List "built an economic floor under the pyramid of the future racial state" he might as well blame a car factory for making the car that a

---

<sup>504</sup> The quotation reads such: "As Ruler of the United Netherlands, as Emperor of Germany, and as Head of the Reformation, Charles possessed all the requisite means, both material and intellectual, for establishing the mightiest industrial and commercial empire, the greatest military and naval power which had ever existed -- a maritime power which would have united under one flag all the shipping from Dunkirk as far as Riga." (List, 1841a, p. 41)



drunkard used to run over a child - or blame Jesus Christ for the *Inquisition*.

## **b) Against slavery**

When some scholars have seen List as a forerunner of National Socialism or Nazism, they confuse List's idealist nationalism with the latter's materialist nationalism and affinities with genetics and eugenics.

List's awareness of the role of power also made him aware of the role of racial matters. He argues against slavery both on humanitarian and economic reasons. List sees "abolition of slavery and of vassalage" as a rich source of productive power (Cf. List, 1841a, p. 139)<sup>505</sup>

This is an example that he in general saw no conflict between justice and economic efficiency and rather found that they mutually supported each other in an atmosphere of *Harmony of Interests*.

When Neumann claims that List was "repudiating liberal political thought", he becomes laughable, since he is accusing a devoted democrat who was sentenced to jail several times for his liberal opinions and work, and finally had to emigrate. Furthermore, when Behemoth uses List's argument for a German customs union as a proof for Hitler's expansionism, he confuses peaceful defence by legal customs regulation, with violent military attack.

## **c) Naval armament**

Using naval armament as a suitable example to illustrate the facts more closely, in the area where Britain was especially sensitive, since it was most crucial both for the island of Britain itself and to her imperial ambitions. According to Prof. Hellmut Diwald's *Der Kampf um die Weltmere* ('The Battle for the World Oceans'), German armament was negligible in comparison to British armament up to 1908. Between 1887 and 1898, Great Britain, USA, France and Russia doubled their naval fleets, while Germany's fleet was at a standstill. Great Britain's battleships ('Schlachtschiffe') in 1883 corresponded to all the other fleets all together. Between 1883 and 1897, the ratio of the Axis powers' naval forces was halved, as it sank from 14 % to 7.6 % of the total naval force of the warring parties in WW I (Cf. Diwald, 1980, p. 379 ff.).

It must also be remembered that Great Britain also could count on the navies and other forces of the dominions and colonies of the British Empire; Canada, Australia, New Zealand and South Africa etc. which are not included in the above statistics. The disparity above is therefore underestimated.

Like England, Germany was very dependent upon trade overseas and on both Haag conventions before WW I, she promoted international rules of law at sea. In 1912, Germany suggested to halt her construc-

---

<sup>505</sup> See a larger quotation in the section, *Capital of mind*, in chapter 4.

tion of a naval fleet, if England would accept private property rights at sea. This was rejected by England, thereby retaining her supreme rule at sea. (Cf. Aall, 1939, Ch. 25)<sup>506</sup>

#### **d) The Anglo-German alliance**

List actively favoured an alliance between Britain and Germany, but Lord Palmerston and Sir Robert Peel turned down his suggestions in 1846. Franz Neumann goes perhaps more than a bit too far when he blames List for later German alliance policies of quite another nature, and even blames List for craving for a semi-global German empire,

List was thus to the first to develop the theory that Hitler brought to full flower in *Mein Kampf* and the National Socialist foreign policy attempted to realize during the years preceding the German Russia non aggression pact of 1939: a redivision of the earth between Germany and England ... (Neumann, 1942, p. 106)

Regarding the Anglo-German alliance that List suggested, this in no way means what Neumann superficially interprets as an alliance for “a redivision of the earth”. What List attempted was peaceful avoidance of destructive trade wars between England and Germany, and between England and the Continent for that matter.<sup>507</sup> List did not suggest a military alliance but rather a trade relationship for mutual benefit, and an understanding of mutual protection – e.g. of railway lines to India. He tried to show that England would benefit and prosper more if she allowed Germany to protect herself temporary and thus progress, since this would establish larger and more advanced export markets for English products. He tried to convince England that this would be a win-win policy for all and everyone, as in the final chapter 6, of his proposal for an ‘alliance’ named,

Evidence, that England already has benefitted and also will benefit in the future, from the industrial prosperity of Germany through its moderate protective system (Cf. e.g. List, 1846c, p. 461 ff, my translation).<sup>508</sup>

There was every reason for List to discuss with England on this issue, since Britain obviously felt threatened by the upstarts.<sup>509</sup> Some 70 years after List, the same problem of protecting one’s own interests without unduly confronting the interests of other nations, is discussed

---

<sup>506</sup> See also the section above; *England’s geographical position*.

<sup>507</sup> See also the sections below, where these issues are discussed, starting with *A European defence union*, and *Common interest in free trade*.

<sup>508</sup> In the German original: VI. Beweis, das England bereits gewonnen hat und auch in die Zukunft gewinnen wird durch die industrielle Prosperität Deutschlands und durch sein gemäßigtes Schutzsystem.

<sup>509</sup> See also the section above, *British policy after List*,

by Gustav Schmoller in the context of German unification through a customs union: The British foreign secretary,

Palmerston announced this Zollverein to be a measure directed against England and against which reprisals must be made. (Schmoller, 1900, vol. II, p. 705)

The hope of achieving an amiable understanding with England nevertheless continued, and as Kaiser Wilhelm II, said; “it was his intention to establish the best of relations with her.” (Cf. Witte, 1921, pp. 408)

### **e) Customs union as expansionism?**

Franz Neumann makes an effort to connect List to National Socialists expansionism. He argues that List and *the Katheder Socialists* in *the Historical School* developed an imperial theory,

England must recognize, List declares, that Germany cannot become strong on the basis of free trade. Free trade is a fit doctrine only for a nation that is already powerful. Germany is disunited and weak, and only protective tariffs can assure her political unity and economic power. Germany has to become strong so that she is able to keep England’s competitors, France and Russia, at bay ... (Neumann, 1942, p. 104)

Edward Mead Earle writes in the heat of 1944, that List was the founder of a tradition of German expansionism in Europe. Unfortunately, Earle does not go into the details, which would have revealed that List’s strategy was peaceful and not about military conquests,

List has been adopted by the expansionists, the Pan-Germans, and even the Nazis as a patron saint. ... The foregoing is not very different from present-day German definitions of Lebensraum, as will be obvious from List’s program for a Greater Germany. (Earle, 1943b, p. 141 n68, and p. 144)

Moreover, Earle writes,

List did not hesitate to take the step. He wanted a unified Germany to hold sway from the Rhine to the Vistula and from the Balkans to the Baltic. (Earle, 1943b, p. 141)

It is somewhat common to confuse List’s suggestion for a Continental defence league against England, in the shape of a customs union, with a quest for German Empire, with colonies. Neumann is correct to the extent that List wanted Germany to become strong in order to defend herself, as opposed to having been the battle ground of other nations in Europe. Nevertheless, Neumann forgets List’s peace-promoting recommendations, regarding e.g. international conferences and trade agree-

ment - in order to accomplish true free trade, as opposed to the rule of the mightiest (of the contemporary British Empire).

List's plans for an extended German Customs Union that included Germany's natural coastline and the estuaries of her greatest navigable rivers: Holland, Belgium and Denmark (Cf. List, 1841a, pp. 175-176) was therefore of a different nature than Neumann and Earle claim.

Furthermore, the strategy of creating a middle-European customs union, in 'Mitteleuropa', has often been connected to List, although he in effect argues for a North-European customs union.<sup>510</sup> Here is one instance of this misunderstanding, also blaming List for the disaster of WW I: Megan Davies writes,

The most serious result of List's ideas, however, was a change in people's thinking and perception. Instead of seeing trade as a cooperative process of mutual benefit, politicians and businessmen came to regard it as a struggle with winners and losers. Germany's leaders, instead of seeing Russia's rapid growth after 1890 as an opportunity and blessing, agonized over it as a terrible threat. Their response was the idea of "Mittel Europa," a customs union including Germany, Austria-Hungary, and the Balkans, which would supply Germany with raw materials while providing a captive market. The leaders also advocated colonies outside Europe and a "blue water" navy. This provoked a similar and hostile response from other powers, especially from Russia. The result was a clash of imperialisms in the Balkans, and in July 1918 the German elite took the (insanely foolish) decision to fight a war with Russia and France. Had they seen the world differently this would not have happened. (Davies, 2004)

Megan Davis obviously confuses List's realistic *description* of the violent *past* with his *promotion* of a peaceful *future* regulated by international law. Davis also forgets List's defence of Russia's right to develop herself, no matter whether this damaged German interests (Cf. List, 1841a, pp. 92-93).

The term 'Mitteleuropa' was furthermore not invented by List, but goes back at least to the geographer Johann August Zeune (1778-1853).<sup>511</sup>

Schmoller's mentioned suggestion<sup>512</sup> of a customs union "from Belgium .. to the Persian Gulf" (Cf. Schmoller, 1900, vol. II, p. 705) follows List's promotion of a railway line from Ostende in Belgium to Bagdad - and further on to Bombay, India (Cf. List, 1846c). The plans of List and of Schmoller are not parallel, but complement each other.

---

<sup>510</sup> As noted above; including Germany, the Netherlands, Belgium, and Denmark.

<sup>511</sup> Zeune used the term in his book *Gea – Versuch einer wissenschaftlichen Erdbeschreibung* ('Attempt of a scientific description of the earth'). (Zeune, 1808)

<sup>512</sup> See the section above, *British policy after List*,

## f) German expansionism

A closer look at the behaviour of the great powers in the period after 1871 and before WW I, will show that quite contrary to rather common belief; Germany was the least aggressive of the great powers, relatively speaking. This can be illustrated with the areas conquered along its own borders as well as colonies conquered.

As Chancellor Otto von Bismarck unified the German speaking areas in Europe, Prussia added no areas other than those populated by German peoples, and for political reasons he did not try to incorporate Austrian administered areas.<sup>513</sup>

After Bismarck's resignation in 1890 and until WW I, under German chancellor Leo von Caprivi, Germany added no areas in Europe other than the former German coastal island of Heligoland in 1890.<sup>514</sup> In this period, Germany acquired some colonies in Africa.<sup>515</sup>

During this period, the other great powers likewise hardly engaged in expansion at home but on the other hand engaged in massive expansion abroad, in particular in Africa and Asia. France, Belgium, Russia, Japan, the USA, and Britain in particular, added enormous areas as colonies. The older colonial powers of Portugal and the Netherlands still had sizeable colonies in Africa and Asia, although considerable portions had been occupied by the British Empire. The older colonial powers retained these colonies at the mercy of Britain who ruled the seas, in exchange for commercial privileges to British companies. And as Gallagher and Robinson writes,

It ought to be a commonplace that Great Britain during the nineteenth century expanded overseas by means of 'informal empire'. (Gallagher and Robinson, 1953)

South American countries had liberated themselves from Spain and Portugal with British help, thereby opening up these markets for British companies which were particularly active in railway construction in Argentina, Chile and Brazil. The US was later more direct and forcibly re-

---

<sup>513</sup> Out of a total population of 56 million in the (second) German Empire in 1900, the major minorities were 3.6 million Slavs in the east, mainly Poles (3) notably in the former administered Prussian regions, plus 0.15 million Danes, and 0.1 million Dutch and Frisians. They had the same civilian and political rights as any other German citizen (Cf. *Statistik des Deutschen Reichs*, Vol. 150, 1903). The Austrian-Hungarian Empire was a very mixed pot of ethnicities, which might not have appealed to a stability seeking realist like Bismarck...

<sup>514</sup> Heligoland was occupied by Britain in 1807, and it was re-acquired by Germany as an exchange object with Great Britain, for the giving up the claim to the island of Zanzibar in East-Africa.

<sup>515</sup> They were; Cameroon; Zanzibar; German East Africa (Tanganyika, now Tanzania, Ruanda-Urundi, now Rwanda and Burundi); and German South West Africa (now Namibia). These were all lost in WW I, mainly to Great Britain

moved Spain from its last sizeable colonies in the US's hemisphere, the Philippines and Cuba.

Regarding indications of 'authoritarianism', there is scant reason to argue that Germany in no way was more aggressive and militaristic than other great European powers of the same period.

Furthermore, before WW I Germany had a democratic system with a higher representation of the lower classes through the Marxist Social Democratic Party, than any other country. Why is then Germany seen as the more militaristic and despotic nation in the common historical perception? Paradoxically, the reason may be the more democratic nature of Germany. In *The Pity of War: Explaining World War I*, Niall Ferguson claims that the reason is that the anti-militaristic forces were far stronger in Germany than in any other great power, and that they therefore were heard much more easily in their rather successful fight against militarism,

Paradoxically, the anti-militarists in Wilhelmine society were so numerous and so vociferous that we have come to believe their complaints about the militarism of Germany, instead of realizing that the very volume of their complaints is proof of the reverse. Thus there is now a dauntingly large literature on German militarism, not all of which acknowledges that the term itself originates in left-wing propaganda. (Ferguson, 2003, p. 26)

## **7.21 A European defence union**

When referring to List's description of the German difficulties of trade and the recent disaster in Europe, Adolph Wagner declares in 1947 that,

We must create a form of United States of Europe. (Wager, 1947, p. 314)

List argues that England holds her colonial power due to her manufacturing power, and if the European Continental nations wish to take part in colonisation they too must industrialise and build merchant fleets and navies. If England hinders them they must unite,

England owes her immense colonial possessions solely to her surpassing manufacturing power. If the other European nations wish also to partake of the profitable business of cultivating waste territories and civilising barbarous nations, or nations once civilised but which are again sunk in barbarism, they must commence with the development of their own internal manufacturing powers, of their mercantile marine, and of their naval power. And should they be hindered in these endeavours by England's manufacturing, commercial, and naval supremacy, in the union of their powers lies the only means of reducing such unreasonable pretensions to reasonable ones. (List, 1841a, p. 270)

Russia's traditional friend was Germany and its traditional foe was England, regarding for instance India. List's admirer, Russian Prime Minister Sergei Witte, went further than List and included Russia in a future European Continental Union. Witte here refers to a conversation in 1897 with the German Kaiser Wilhelm II, regarding competition with overseas nations,

I went on to say that to the rest of the world Europe seemed to be like a woman in her declining years, that if Europe continued on her present course, she would become totally enfeebled in a few centuries and lose her international primacy, while the overseas countries would become strong; in a few centuries the greatness of Europe would seem like a thing of the past, like the greatness of the Roman Empire, Greece, Carthage, and some of the states of Asia Minor. I added that the time might come when Europe would be treated with the respect shown to aging, well-bred beauties on their last legs.

The German Emperor was astonished by my prognosis and asked what should be done to prevent such a decline. I said:

Imagine Your Majesty, the European countries united in one entity, one that does not waste vast sums of money, resources, blood, and labor on rivalry among themselves, no longer compelled to maintain armies for wars among themselves, no longer forming an armed camp, as is the case now, with each fearing its neighbor. If that were done, Europe would be much richer, much stronger, more civilized, not going downhill under the weight of mutual hatred, rivalry, and war.

The first step toward attaining this goal would be the formation of an alliance of Russia, Germany, and France. Once this were done, the other countries of the European continent would join the alliance. As a consequence Europe would be freed of the burdens created by existing rivalries: Europe would be mighty, would be able to maintain a dominant position for a long time. But, if the European countries continue on their present course, they will be risking great misfortune. (Witte, 1990, p.268)

After referring to the unbreakable tie which exists between political prestige and economic power, I declared to His Majesty that, among the countries of the world, Europe seemed to me like a decrepit old woman. Unless a radical change is brought about, I went on, Europe will soon have to yield her dominating place in the world to the mighty empires which are rising beyond the seas. The time is not far off, I said, when this continent will be treated with that condescending respect which well-mannered people accord to venerable old age, and before the next few centuries are past, the greatness of Europe will be to the inhabitants of our planet what the grandeur of Rome, the glory of Greece, and the might of Carthage are to us.

The German Emperor was deeply impressed by my words and inquired how I proposed to deal with the disastrous situation I envisaged. "Your Majesty," I said, "picture a Europe which does not waste most of its blood and treasure on competition between individual countries, which does not maintain millions of soldiers for internecine wars, which is not an armed camp with each country pitted against its neighbour, a Europe which is, in brief, one body politic, one large empire. Then, of course, we would be richer, and more vigorous, and more cultured, and Europe, instead of withering

under the -burden of strife, would become truly the mistress of the world. To achieve this ideal we must seek to create a solid union of Russia, Germany and France. Once these countries are firmly united, all the other States of the European continent will, no doubt, join the central alliance and thus form an all-embracing continental confederation, which will free Europe from the burden of internecine competition and establish its domination over the world for many years to come." (Witte, 1921, pp .408-409)

A basic reason why Germany was vulnerable was lack of raw materials relative to her population. Richard N. Coudenhove-Kalergi writes in 1943, in his *Crusade for Pan-Europe* that France was in a very different situation. Whereas the logical solution for Germany was a European union, this might be suicidal for French industry,

Another difference between the two nations arose from the fact that France's problems were primarily political, Germany's main problem centered in its overpopulation, a problem complicated by its poor soil and its lack of raw materials. In order to live and produce, Germany had to import. In order to pay for its imports, it had to export. Unless imports and exports balanced each other on the national credit sheet, the country faced starvation and ruin.

As long as the old system of economic sovereignty prevailed in Europe, Germany always feared that its neighbors would raise their customs tariffs to a ruinous extent. What it needed was a safe market which could not be closed by high-handed or self-sufficient neighbors. Pan-Europe provided such a market, for it implied an economic and monetary union. It also implied free access to raw materials in tropical colonies.

France had none of Germany's economic problems. She had no surplus population. She had a rich colonial empire that she had only begun to exploit. Products of her industry were absorbed by the home markets; export was a luxury, not a vital need; in fact, the majority of the French industrialists were more occupied with defending their national markets against German, British, Belgian and American competition than with conquering new markets abroad. Postwar France was a protectionist country. She was well aware of Germany's superior methods of production and thought it suicidal to give such dangerous competition a chance in her own market. (Coudenhove-Kalergi, 1943, pp. 121-122)

Robert Strausz-Hupé founded the US based FPRI, the *Foreign Policy Research Institute*, in 1955. Strausz-Hupé claims that it is natural that in a continental system, a giant state, one people will dominate,

As policy evolves towards several continental systems, and technology accentuates the strategic importance of large, contiguous areas. Thus the era of overseas empires and free world trade closes. If this reasoning is pushed to its absolute conclusion, the national state is also a thing of the past, and the future belongs to the giant state. Many nations will be locked in a few vast compartments. But in each of these one people, controlling a strategic area, will be master of the others. (Strausz-Hupé, 1942)



List sees Germany as the natural centre of a united Europe, that could withstand English supremacy and secure Continental peace, but Germany is hindered by her own sluggishness,

Nothing, however, at this time so greatly impedes a closer union of the continent of Europe as the fact that the centre of it still never takes the position for which it is naturally fitted. ...

If, on the other hand, Germany could constitute itself with the maritime territories which appertain to it, with Holland, Belgium, and Switzerland, as a powerful commercial and political whole—if this mighty national body could fuse representative institutions with the existing monarchical, dynastic, and aristocratic interests, so far as these are compatible with one another—then Germany could secure peace to the continent of Europe for a long time, and at the same time constitute herself the central point of a durable Continental alliance.

That the naval power of England greatly exceeds that of all other nations, if not on the number of ships, yet certainly in fighting power—that hence the nations which are less powerful at sea can only match England at sea by uniting their own naval power, is clear. (List, 1841a, pp. 412-413)

List was well aware of the dangers of a confrontation between England and Germany, and between England and the united European Continent. His point of view and his goal, was that the only lasting solution would be a world free trade, with global free trade and united under one law,

Sooner or later the countries which have reached the second and third stage of industrialisation will have to unite to establish a new Continental System if ever England should show any inclination to use her superior sea power to injure the manufactures or commerce of these countries.

An attempt to set up a new Continental System, however, would endanger the prosperity not only of England but of all nations and -as we have shown in the last chapter - the only satisfactory solution to the problem would be the establishment of world free trade. (List, 1837a, p. 52)

List writes that Napoleon's Continental System was based on the correct view that the nations on the European Continent have much in common as against the English and would benefit from a union. However, Napoleon made the mistake of replacing English dominance with French dominance, and that provoked the other nations on the Continent,

If we only consider the enormous interests which the nations of the Continent have in common, as opposed to the English maritime supremacy, we shall be led to the conviction that nothing is so necessary to these nations as union, and nothing is so ruinous to them as Continental wars. The history of the last century also teaches us that every war which the powers of the Continent have waged against one another has had for its invariable result to increase the industry, the wealth, the navigation, the colonial possessions, and the power of the insular supremacy.

Hence, it cannot be denied that a correct view of the wants and interests of the Continent underlaid the Continental system of Napoleon, although it must not be ignored that Napoleon desired to give effect to this idea (right in itself) in a manner which was contrary to the independence and to the interests of the other Continental powers. The Continental system of Napoleon suffered from three capital defects. ... (List, 1841a, pp. 421, for the rest of the quotation, see the section, *Napoleon's legacy*, in chapter 2)

List claims that a Continental system is the only way the Continental nations can secure their overseas interests in the colonies, and that the union must be voluntary,

An effective Continental system can only originate from the free union of the Continental powers, and can succeed only in case it has for its object (and also effects) an equal participation in the advantages which result from it, for in that way only, and in no other, can the maritime powers of second rank command respect from the predominant power of England in such a way that the latter without any recourse to the force of arms will concede all the just requirements of the less powerful states. Only by such an alliance as that will the Continental manufacturing powers be able to maintain their relations with tropical countries, and assert and secure their interests in the East and the West. (List, 1841a, pp. 422-423)

List claimed that English resistance to industrialisation of the Continental nations should soon end and be replaced by an alliance, when Britain understood that she would be surpassed by far by the United States,

In any case the British, who are ever too anxious for supremacy, must feel it hard when they perceive in this manner how the Continental nations will reciprocally raise their manufacturing power by mutual commercial concessions and by treaties; how they will reciprocally strengthen their navigation and their naval power; how they will assert their claim to that share for which they are fitted by nature in civilising and colonising barbarous and uncultivated countries, and in trade with tropical regions. Nevertheless, a glance into the future ought sufficiently to console the britons for these anticipated disadvantages. ... For the same causes which have raised Great Britain to her present exalted position, will (probably in the course of the next century) raise the United States of America to a degree of industry, wealth, and power, which will surpass the position in which England stands, as far as at present England excels little Holland. (List, 1841a, p. 423)

List claimed that in the future, England would have to join the European Continent in order to defend itself, against American supremacy, and that she should prepare herself for this,

Even if the nineteenth century should pass without the doctrine "free ships, free goods" being generally accepted, the twentieth century will surely see its adoption.

When that time comes England will be the country to advocate the adoption of the principle and people will discuss how best to check the arbitrary power of the United States of America. (List, 1837a, p. 128)<sup>516</sup>

Thus in a not very distant future the natural necessity which now imposes on the French and Germans the necessity of establishing a Continental alliance against the British supremacy, will impose on the British the necessity of establishing a European coalition against the supremacy of America. Then will Great Britain be compelled to seek and to find in the leadership of the united powers of Europe protection, security, and compensation against the predominance of America, and an equivalent for her lost supremacy.

It is therefore good for England that she should practise resignation betimes, that she should by timely renunciations gain the friendship of European Continental powers, that she should accustom herself betimes to the idea of being only the first among equals. (List, 1841a, pp. 423-424)

With the experience gained in the soon to be two centuries since List wrote this, he may be said to have been either very lucky or having had prophetic insight: As most nations, the US has acted according to its own interests. In the recent past, the US has often stretched international law and agreements, for instance often using tariffs against “un-fair competition” against its own industry.

Interestingly and according to the Russian PM Sergei Witte; some 60 years after List, Kaiser Wilhelm II suggested to Emperor Nicolai II of Russia that Europe should erect a Continental economic union of defence against the USA. Witte warned that Britain’s interest were not similar to the Continent, but in any case Russia wanted to continue a friendly relationship to the USA,

... After a while the Emperor drew me into the Ambassador's study, where we remained alone.

He opened the conversation by calling my attention to the dangers which were threatening Europe from beyond the seas. America, he said, is growing rich at Europe's expense, and it is necessary to build a high tariff wall around Europe so as to make it impossible for America to flood us with its products. The European countries must unite to shut out the transatlantic competitor, who is growing very dangerous, especially as regards agriculture, and thus to arrest the development of the United States of America. I took the liberty then of observing to the Emperor that the interests of continental Europe were not identical with those of Great Britain and that, therefore, she would have to be excluded from the contemplated European union. His Majesty retorted that England constituted no danger for the agriculture of Europe and that she could not be excluded, for the reason that it was his intention to establish the best of relations with her. The tariff wall should be erected against America alone, he reiterated.

Thereupon I pointed out that, whether or not England was included, an economic war against America was not practicable, because many Europe-

---

<sup>516</sup> This quotation has also been used in the section below; *Promote free trade by international law, treaties and congresses*

an countries were not likely to agree to it. Speaking for Russia, I went on saying that we would be loath to embrace His Majesty's viewpoint, for the reason that ever since the American Revolutionary War we had been on the best of terms with the United States of America and that we did not intend to quarrel with that country. (Witte, 1921, pp. 408)

## **7.22 Common interest in free trade**

List argues that advanced countries including England would gain from opening their monopolies on colonial trade, and that the selfish and greedy policy of rival nations is the greatest hindrance to universal progress. By adopting free trade, the advanced nations would strike at the root of this evil of national selfishness. England should for her own benefit agree to share before she is overrun by history; the development of new means of transport (read: railroads etc.); and armaments.

List attacks English agricultural protectionism and sabotage of Continental manufacturing as silly and counterproductive, because it hinders Continental nations in getting an income sufficient to pay for more advanced English products,

How can England indulge the hope of selling manufactured goods to countries whose colonial products she cannot take in exchange? Or how can a great demand for colonial produce spring up in the continent of Europe, if the Continent is not enabled by its manufacturing production to pay for, and thus to consume, these goods?

It is therefore evident, that keeping down the manufacturing industry of the Continent, though it certainly hinders the progress of the Continental nations, does not in the least further the prosperity of England. ... (List, 1841a, p. 193)

England should instead encourage the industrial development of its potential competitors since this would open up for exports of more advanced products from England and thereby make further cultural advance in England not only possible but necessary. This was unfortunately naïve reasoning, but probably the only possible reasoning for List as a humanist.

List expresses hope for the future of manufacturing on the European Continent and argues that first the home market must be secured by establishing a German commercial union which will pay for tropical products with manufactured goods,

The advance which England has made in manufactures, navigation, and commerce, need therefore not discourage any other nation which is fitted for manufacturing production, by the possession of suitable territory, of national power and intelligence, from entering into the lists with England's manufacturing supremacy.

A future is approaching for manufactures, commerce, and navigation which will surpass the present as much as the present surpasses the past. Let us only have the courage to believe in a great national future, and in

that belief to march onward. But above all things we must have enough national spirit at once to plant and protect the tree, which will yield its first richest fruits only to future generations. We must first gain possession of the home market of our own nation, at least as respects articles of general necessity, and try to procure the products of tropical countries direct from those countries which allow us to pay for them with our own manufactured goods. This is especially the task which the German commercial union has to solve, if the German nation is not to remain far behind the French and North Americans, nay, far behind even the Russians. (List, 1841a, p. 194)

List argues that the establishment of a European Union, a new Continental System, would not suffice to ensure international free trade and therefore France and the United States should take the lead and invite all nations to a world trade congress with the goal of establishing a world customs union. A new Continental System for the common defence against England would, however, endanger the interests of all and can only be avoided by adopting universal free trade, which would establish a win-win situation for all. Furthermore, the growth of the USA makes it inevitable that England would benefit from preparing to share her position with others in order to check the future whims of the USA. Here are a few extracts regarding the mutual interest in free trade,<sup>517</sup>

Here is a great opportunity to apply the principles of the doctrine of cosmopolitan economics in a practical way. Far from injuring any country this would bring together the special interests of every nation in a valuable common enterprise.

... industrial states can promote the expansion of shipping, commerce, and manufacture' much more by opening their overseas possessions to the trade of all nations than by monopolising the commerce of their colonies. ...

A liberal policy of this kind would strike at the very root of the evil of economic selfishness. (List, 1837a, pp. 48-51)

### **7.23 Common interests? – recent development**

China has for a decade been blamed of having a skewed trade- and payments balance, harming the interests of the established industrial nations. The recent development of China, however, illustrates how the development of a late coming country also may benefit the already established industrial nations.

China has for some time gradually changed its balance of trade to a larger import to export ratio, and increasingly the import consists of more complicated and demanding goods and services. In 2010 alone China's import grew by 40 %. Jim O'Neill; 'Mr. Bric',<sup>518</sup> was interviewed by BBC in the article, *The year in business: 2010*, pointing to the recent

---

<sup>517</sup> List's discussion from 1837 on these matters is so important that a lengthy quotation has been supplied in appendix 1b.

<sup>518</sup> Chairman of Goldman Sachs Asset Management. In 2001 he coined the term 'BRIC countries' to designate the new upcoming developing nations.

surge in Chinese import that creates opportunities for Western companies and countries,

Mr O'Neill says the US trade deficit with China is now falling sharply. "The US current account deficit year-to-date is running about half what it was before the crisis and the Chinese trade surplus is not much more than 3% of GDP."

He believes, however, that due to the rather emotional atmosphere in Washington, such data seems to be completely ignored by Congress. ...

The Chinese currency has risen by over 20% the past five years. Chinese import growth is rising at over 40% - in the year to date, Chinese import growth has been close to \$400bn.

Many people would argue that such figures are mainly due to the import of raw materials.

"No it is not," says Mr O'Neil.

"Look at countries that are really good at exporting, like Germany.

Some of Germany's top companies are employing people on overtime purely because of exports to China." (BBC, 2010)

Just as illustrating, in 2010 China overtook the USA as the single most important country for German exports. (The Local, 2011b). In 2010 Germany's exports rose 18,5 % (The Local, 2011a) and were booming in particular in the upcoming markets. This is even more illustrating and important since German exports are relatively sophisticated. Due to higher wages in China, the demand for German is increasingly for products that will reduce Chinese production costs, such as machinery tools and robotics. The German news service *The Local* reports that,

The boom regions for German exports were China, Southeast Asia, Brazil and the Arabian peninsula, ...

Machine tools, cars, chemicals and electronic equipment were the big sellers.

Official figures from the Federal Statistical Office show that in the third quarter of 2010, exports to Russia rose 42.4 percent and exports to China climbed 34.3 percent. (The Local, 2010)

In 2008, Jim O'Neill wrote that the global middle class is exploding and therefore reducing global income inequalities. This is closely related to the above point, since the global growth of the middle-class increases the demand for sophisticated products from the established industrial nations,

Linked to the current mood, commentators often depict an embattled and shrinking middle class, with sharply rising financial inequality. However, globally, this is simply not true. One of the most startlingly positive phenomena for many generations continues to unfold around the world. We are in the middle of an explosion of the world's middle class. ...

This is a Bric-driven phenomenon, but the "next 11" are making their contribution and other nations will also participate. (O'Neill, 2008)

O'Neill continues by saying that,

It is important for everyone in the so-called developed world to be constantly aware that these powerful shifts in global wealth are good not only for the developing world, but for them too. If you take a look at a chart of recent US export growth, you may well think you are looking at the wrong data series. But you are not. US exports are indeed growing at close to 20 per cent and it is this that is stopping the housing and credit crunch from driving the US into a deep recession. Aspects of the same phenomenon can be seen in Japan, Germany and even the UK. (O'Neill, 2008)

The German export of luxury cars to China is illustrative of the point that the development of emerging markets can be a boon to the established industrial nations, who therefore ought to continue to improve themselves,

"2011 will be the German car industry's best year ever and 2012 will be even better," said Helmut Becker, director of the Munich-based Institute for Economic Analysis and Communication. ...

Strong demand in export markets, particularly the US and China, kept the factories of German luxury car makers humming all of last year. ...

Chinese demand for luxury cars is even more robust. The luxury car segment expanded by more than 40 percent in 2010, led by Audi. Nine of the top selling luxury nameplates in China are German, ... (Deutsche Welle, 2011)<sup>519</sup>

Nevertheless, the Chinese devotion to education and to research should alert established industrial nations that their head start may soon come to an end. According to a report from the OECD, in 2006 China surpassed Japan in absolute spending on R&D,

The report is the latest indication of the dramatic rise in research spending in China, which is beginning to cause concerns among western governments.

Dirk Pilat, head of the OECD's science and technology division, said the surge in Chinese research was "stunning". He added: "Chinese investment has been growing rapidly for some time, but it is still a surprise that it has overtaken Japan so quickly."

---

<sup>519</sup> Perhaps contrary to common belief, Germany's export success also has a positive effect on her closest neighbours,

"Strong growth of the German economy is also having a positive effect in our neighbouring countries," Commerzbank analyst Ulrike Rondorf noted.

"Solid domestic demand is pushing imports up, including imports from the eurozone," she said.

Almost 60 percent of German exports last year went to fellow EU member countries, while they accounted for 63 percent of German imports. ...

For the full EU, German exports gained 14 percent, but imports rose by 17.5 percent. (Deutsche Welle, 2011)

Mr Pilat said that the bulk of the spending in China was on development work, to alter products for the fast-growing Chinese market, rather than basic scientific research.

The number of patents coming from China that were registered with the patent office in the US, Europe and Japan is still low and a string of recent scandals over academic fraud have also raised questions about how well the money is spent.

But Mr Pilat added that some multinationals were beginning to move genuine research to China because of the high numbers of skilled scientists they could recruit in Shanghai or Beijing. "There are some signs that they are starting to do fundamental or breakthrough work in China," he said.

As well as increasing spending on university science departments, the government has also been eager to attract multinational companies to open research centres in the country. (China overtakes Japan on R&D, Financial Times, 2006)

But what may be more enervating to the established industrial nations is the increasing speed, by which China is catching up and surpassing the West in R&D. According to the BBC, a study by the Royal Society, UK,<sup>520</sup> claims that China may soon and deliberately so overtake even the US in scientific output,

"Projections vary, but a simple linear interpretation of Elsevier's publishing data suggests that this could take place as early as 2013", it says. ...

The authors describe "dramatic" changes in the global scientific landscape and warn that this has implications for a nation's competitiveness.

...

However the report points out that a growing volume of research publications does not necessarily mean an increase in quality. ...

Although China has risen in the "citation" rankings, its performance on this measure lags behind its investment and publication rate.

As to China's motivation, Dr Cao believes that there is a determination not to be dependent on foreign know-how - and to reclaim the country's historic role as a global leader in technology. (BBC, 2011)

## **7.24 Curing global market imperfections**

Although England, by striving for supremacy, increases the productive powers of the world, she hinders the integration of all other nations, thereby sabotaging global economic efficiency, List argues,

What they all have to fear at this time is solely the preponderating competition of England.

Thus it appears also from this point of view, that the supremacy of that island in manufactures, in trade, in navigation, and in her colonial empire, constitutes the greatest existing impediment to all nations drawing nearer to one another; although it must be at the same time admitted that Eng-

---

<sup>520</sup> - based on published research listed by the publisher Elvier's Scopus service.



land, in striving for this supremacy, has immeasurably increased, and is still daily increasing, the productive power of the entire human race. (List, 1841a, p. 325)

In a larger perspective, regulation and protection limited by time (and branch) may be seen as contributing more to competition than immediately introducing free trade. Protection may be seen as a remedy to correct international market imperfections where some actors have the upper hand. National temporary protection thereby serves to increase long-term global competition. Indeed, this was List's opinion concerning the strong position of English producers in his day, and this way of interpreting List is not new.

As J. S. Nicholson points out, in his 'Introductory Essay' to the 1904 reprint of List's *National System*,

This is the argument which was developed in theory by Henry Sidgwick to show that ultimately the world at large might gain by the temporary protection of the constituent nations . And on the practical side it is this argument which is most popular in the British colonies. The colonies are protectionist because they wish to become complex industrial nations, .. (Nicholson, 1904)

Nicholson furthermore writes that the distinction between free trade and protectionism is somewhat superficial, since at bottom both are tools for the greater good, the productive force,

On List's view there is no real opposition between free trade and protection, because neither is an end in itself, but simply a means to achieve a certain end, namely, the greatest development of productive power. Which policy may be better at any time depends on the stage of development of the nation in relation to the development of other nations. For the time being a protective duty involves a loss. But the present loss is justifiable if in the future there will be a greater gain. (Nicholson, 1904)

Furthermore, the national parallel to this international problem is of course anti-trust legislation, which is a widely accepted form of regulation also among ardent liberalists and the incentive stems from the natural monopolising tendency of unregulated capitalism, as described by Adam Smith,

People of the same trade seldom meet together, even for merriment and diversion, but the conversation ends in a conspiracy against the public, or in some contrivance to raise prices. It is impossible indeed to prevent such meetings by any law which either could be executed, or would be consistent with liberty and justice. (Smith, 1776, vol. I, book I, ch. 10, p. 145)

Not only did Smith deem countermeasures such as anti-trust laws impossible, but he conveniently left out the international interpretation of this principle of effective competition:

Temporary national protection will eventually lead to fiercer competition and a more efficient global economy at a later stage. List answered his critics with precisely this argument and claimed that foreign domination of domestic markets consisted in a monopoly (Cf. List, 1841a, pp. 169–71, 176–7). He saw no advantage in a foreign (British) monopoly over that of, not a domestic monopoly, but rather internal competition (Cf. List, 1841a, pp. 184, 189–93). He therefore set out to establish domestic production to replace the foreign monopolies ('import substitution') as a first step of development. On the other hand, establishing infrastructure was one important element of making this come about and at the same time increase the competition, since neither division of labour, markets nor competition can exist without communication. One of the chief effects of improved infrastructure is precisely more efficient competition, levelling prices of many local markets.

List may be a greater free trader than the so-called free traders, in the sense that List's strategy would promote long-term competition to a larger degree, and thereby promote global wealth-creation more efficiently, by their own arguments. This was indeed List's own opinion (Cf. List, 1841a, p. 131). This is a matter of perspective; of time and economic complexity, regarding for instance inter-relationship between markets. List would claim that Smith might be said to be a free trader only from a static short-term and relatively superficial perspective concerning the interests of Britain only, and that this was the deliberate choice of Smith. And indeed Ricardo, who elaborated Smith ideas into the theory of comparative advantage, has been criticised for having established a static trade theory (e.g. Cypher & Dietz, 1998) that does not take into account learning, which in its very essence is dynamic.

List, as Smith, had a global perspective and an historical perspective. List, however, claims to be more aware of wider and deeply rooted social and international interrelationships especially concerning power-relations. List's criticism of the free trade policy of Adam Smith's followers, was by force of the prevailing situation; British policy and domination

List promoted the establishment of domestic manufacturing in order to erect competition to foreign monopolies that might dictate domestic consumption and production. In fact, List writes that monopolisation is the nature of industry, and precisely this justifies protection,

In any case striving after monopoly forms part of the very nature of manufacturing industry. This circumstance tends to justify and not to discredit a protective policy; for this striving, when restricted in its operation to the home market, tends to promote cheaper prices and improvements in the art of production, and thus increases the national prosperity; while the same thing, in case it presses from without with overwhelming force on the internal industry, will occasion the interruption of work and downfall of the internal national industry.

The circumstance that there are no limits to manufacturing production (especially since it has been so extraordinarily aided and promoted by machinery) except the limits of the capital which it possesses and its means of

effecting sales, enables that particular nation whose manufacturing industry has continued for a century, which has accumulated immense capitals, extended its commerce all over the world, dominated the money market by means of large institutions of credit (whose operations are able to depress the prices of fabrics and to induce merchants to export), to declare a war of extermination against the manufacturers of all other countries. Under such circumstances it is quite impossible that in other nations, 'in the natural course of things' (as Adam Smith expresses himself), merely in consequence of their progress in agriculture, immense manufactures and works should be established, or that those manufactures which have originated in consequence of the commercial interruptions caused by war should be able, 'in the natural course of things,' to continue to maintain themselves. The reason for this is the same as that why a child or a boy in wrestling with a strong man can scarcely be victorious or even offer steady resistance. The manufactories which constitute the commercial and industrial supremacy (of England) have a thousand advantages over the newly born or half-grown manufactories of other nations. (List, 1841a, p. 299-300)

## 7.25 A sudden & universal republic of merchants

List criticises the view of Cosmopolitanism as a theory that surrenders the interest of production to that of exchange,

... commerce must be regulated, according to the interests and wants of agriculture and manufactures, not *vice-versa*.

But the school has exactly reversed this last dictum ... This perversity of surrendering the interests of manufactures and agriculture to the demands of commerce without reservation, is a natural consequence of that theory which everywhere merely takes into account present values, but nowhere the powers that produce them, and regards the whole world as but one *indivisible republic of merchants*. (List, 1841a, 259)<sup>521</sup>

So, List claims that commerce must be regulated according to the needs of production, and not the way around - as the radical free trade school prefers to have matters.

For a long time the recognised goal of the free trade school has been to establish a world government, in order to secure global free trade. This was pointed out by List (Cf. List, 1841a, p. 120ff) and by Wilhelm Roscher (Roscher, 1877, § LXVII) concerning the explicit ideas of J.B. Say and Quesnay on a universal republic.

List agreed with this goal, but as mentioned he criticised the method these economists envisaged for attaining this goal since immediate implementation would lead to a monopoly under the strongest producer and merchant, namely England.

List claims that English promotion of free trade is only pretence for cynical national egotism. England is the master of all markets, and

---

<sup>521</sup> This quotation has also been used in the section, *Generalisations play down regulation and nation*, in chapter 3.

equal treatment of her manufactures and those of weak nations will only lead to the destruction of the weak and a global monopoly for England, both economically and politically. All states therefore have a common interest in defence against England's 'whims',

A nation which makes goods more cheaply than anyone else and possesses immeasurably more capital than anyone else is able to grant its customers more substantial and longer credits than anyone else. In competition with its rivals such a nation will also be able to command the lion's share of the market in poorer and less advanced countries.

By accepting or by excluding the import of their raw materials and other products, England - all powerful as a manufacturing and commercial country - can confer great benefits or inflict great injuries upon nations with relatively backward economies. What England does depends upon whether her economic policy is inspired solely by self-interest and national passions and prejudices or whether her policy is inspired by a higher morality and by nobler aims. The latter is hardly to be expected at all times and in all circumstances.

All states have a common interest in defending themselves against the damage that England, enjoying world economic supremacy, can arbitrarily inflict upon their industries.

On the other hand England, with her advanced economy, could inaugurate the gradual establishment of greater freedom of trade throughout the world. But this freedom would not be achieved by insisting that states in the second and third phase of industrialisation should open their home markets to unlimited competition from English manufactured goods.

Should England pursue such a policy she would be pretending to foster the wider interests of mankind while really fostering her own selfish interests. Free competition between the advanced factories of England and the relatively backward factories of other manufacturing countries would - as we have already shown - simply lead to the destruction of the industries of the weaker states. This would mean that the countries in question would not merely give up all prospects of economic expansion in the future but would actually lose the progress that they had achieved in the past towards the establishment of a more advanced economy.

It is surely reasonable to suggest that no nation should try to hasten the future economic advance of the human race by sacrificing the progress that it has already made towards establishing its own national economic independence. Such a policy, far from being advantageous to humanity in general, would be to the sole advantage of the dominant economic nation.

Manufacturing states which have reached the second or third phase of industrialisation might hope to extend free trade by uniting with the dominant nation but such a policy should be adopted only if the special economic interests of the countries concerned are adequately safeguarded. (List, 1837a, pp. 47-48)

Before the turn of the 21<sup>st</sup> Century and the rise of newcomers like China, the establishment of the United Nations and the closely related IMF, WTO and the World Bank, together established a universal although informal credit cartel, as long as other creditor nations demanded that the rules of these institutions had to be followed. The sprout of

a global government that started to grow in Bretton Woods in 1944, was about to bloom.

We then seemed to have reached, in principle, a world government dominated by the strongest nations, and practical establishment of this through an informal “union” of creditors. Loans were often given by creditor countries on the condition that the debtor country followed the IMF’s ‘conditionalities’. This union was using debt as the leveller for political concessions of more open markets in the debtor countries, for the creditor countries, a policy as old as the Phoenicians and probably beyond.

One may regard the development after the fall of Bretton Woods as a reversal of the historical process from a productive monopoly capitalism back to pre-1931 financial capitalism. Anthony Sampson calls the British phenomenon in the 1980s a,

... return to the freedom and internationalism of the Edwardian times before it broke apart seventy years ago. (Sampson, 1993, p.115, in the section called; ‘The City Transformed’)

But at the zenith of the British Empire its productive foundations had been allowed to rot. So too at the zenith of the American dominance, she has allowed her productive foundations to whiter away. And with the rise of China, India etc. the former global elite has become diversified and the future is again more open and undetermined, as US Security advisor Zbigniew Brzezinski warned in 2010.<sup>522</sup>

---

<sup>522</sup> At a recent Council on Foreign Relations speech in Montreal, ... Zbigniew Brzezinski warned that a “global political awakening,” in combination with infighting amongst the elite, was threatening to derail the move towards a one world government.

Brzezinski explained that global political leadership had become “much more diversified unlike what it was until relatively recently,” noting the rise of China as a geopolitical power, and that global leadership in the context of the G20 was “lacking internal unity with many of its members in bilateral antagonisms.” ...

“For the first time in all of human history mankind is politically awakened – that’s a total new reality – it has not been so for most of human history.”

Brzezinski continued, “The whole world has become politically awakened,” adding that all over the world people were aware of what was happening politically and were “consciously aware of global inequities, inequalities, lack of respect, exploitation.”

“Mankind is now politically awakened and stirring,” said Brzezinski, adding that this in combination with a fractured elite “makes it a much more difficult context for any major power, including currently the leading world power, the United States.”

During a subsequent question and answer session, Brzezinski was asked if he thought another organization should replace the United Nations as the de facto “one world government,” to which Brzezinski responded, “There should be such an organization,” before pointing out that the UN was not it in its current role. (Watson, 2010)

Furthermore, as yet another indication of the changing global power balance, the IMF in 2010 redrew its recommended policies.

## **7.26 Global free trade - gradually**

Regarding European continental defence against insular English supremacy, List writes that global free trade is the only solution,

... the idea of the Continental System was born because of England's excessive economic power and because of the possibility that England might misuse this power. ...

An attempt to set up a new Continental System, however, would endanger the prosperity not only of England but of all nations and -as we have shown in the last chapter - the only satisfactory solution to the problem would be the establishment of world free trade. (List, 1837a, pp. 51-52)

Adam Smith agreed that sudden deregulation would have disastrous effects and wrote on the matter of trade that, changes in trade policy must be slow,

Changes of this kind should never be introduced suddenly, but slowly, gradually, and after a very long warning. (Smith, 1776, book IV, ch. II, p. 44, in Liberty Fund's edition, p. 471)

So it seems that Smith's radical followers, more than Smith himself, were adherents of such sudden measures.

List agreed with Smith on the desirability of global free trade and also on gradual changes. But List went further. He claimed that instant deregulation and radical free trade would lead to a monopoly under the strongest nation, technologically and economically (Cf. List, 1841a, p. 126), in order to promote the potential wealth of the individual developing nations as well as the global common good.

Although List was a believer in free trade, he was not naïve in this pursuit. List here claims that until the world is united in one federation under the same law, we must expect national emulation of protectionist policies and even wars. Furthermore, List claims that the question of universal free trade cannot be seen as separate from, but rather as tightly connected to the question of political unification of all nations under one law,

Thus history shows that restrictions are not so much the inventions of mere speculative minds, as the natural consequences of the diversity of interests, and of the strivings of nations after independence or overpowering ascendancy, and thus of national emulation and wars, and therefore that they cannot be dispensed with until this conflict of national interests shall cease, in other words until all nations can be united under one and the

same system of law. Thus the question as to whether, and how, the various nations can be brought into one united federation, and how the decisions of law can be invoked in the place of military force to determine the differences which arise between independent nations, has to be solved concurrently with the question how universal free trade can be established in the place of separate national commercial systems.

The attempts which have been made by single nations to introduce freedom of trade in face of a nation which is predominant in industry, wealth, and power, no less than distinguished for an exclusive tariff system—as Portugal did in 1703, France in 1786, North America in 1786 and 1816, Russia from 1815 till 1821, and as Germany has done for centuries—go to show us that in this way the prosperity of individual nations is sacrificed, without benefit to mankind in general, solely for the enrichment of the predominant manufacturing and commercial nation. (List, 1841a, p. 114)

Before deregulation could take place, List argues that less nations therefore had to be lifted up to the level of the leading nation (Cf. List, 1841a, p. 127). This had to be done gradually through legal and regulatory arrangements, nationally and internationally (Cf. List, 1841a, p. 125). This would involve, among other instruments, limited and differentiated protection at home and international legal agreements.

List writes that in the meantime the less advanced nations that feel themselves capable must be allowed to raise themselves by artificial means and adopt the system of protection,

In order to allow freedom of trade to operate naturally, the less advanced nations must first be raised by artificial measures to that stage of cultivation to which the English nation has been artificially elevated. In order that, through that cosmopolitical tendency of the powers of production to which we have alluded, the more distant parts of the world may not be benefited and enriched before the neighbouring European countries, those nations which feel themselves to be capable, owing to their moral, intellectual, social, and political circumstances, of developing a manufacturing power of their own must adopt the system of protection as the most effectual means for this purpose. (List, 1841a, pp. 131-132)

But List also believed that the logic of the capitalist system would eventually contribute to the civilisation of all of mankind, but the task of civilising the barbarian nations can be fulfilled only by political unity. In the meantime, an abundance of skilled people in the developed countries would emigrate and seek employment in the less developed countries. Likewise the abundance of capital in the developed countries would emigrate to more profitable endeavours in less developed, as he had observed both English people and English capital immigrate to the USA,

The farther we advance in this perception, and the more the uncivilised countries come into contact with the civilised ones by the progress made in the means of transport, so much more will the civilised countries comprehend that the civilisation of barbarous nations, of those distracted by inter-

nal anarchy, or which are oppressed by bad government, is a task which offers to all equal advantages—a duty incumbent on them all alike, but one which can only be accomplished by unity.

That the civilisation of all nations, the culture of the whole globe, forms a task imposed on the whole human race, is evident from those unalterable laws of nature by which civilised nations are driven on with irresistible power to extend or transfer their powers of production to less cultivated countries. We see everywhere, under the influence of civilisation, population, powers of mind, material capital attaining to such dimensions that they must necessarily flow over into other less civilised countries. If the cultivable area of the country no longer suffices to sustain the population and to employ the agricultural population, the redundant portion of the latter seeks territories suitable for cultivation in distant lands; if the talents and technical abilities of a nation have become so numerous as to find no longer sufficient rewards within it, they emigrate to places where they are more in demand; if in consequence of the accumulation of material capital, the rates of interest fall so considerably that the smaller capitalist can no longer live on them, he tries to invest his money more satisfactorily in less wealthy countries. (List, 1841a, pp. 125-126)

## **7.27 A gradual & universal republic of peoples**

List discusses the question of future free trade and a universal republic in particular in chapter 11: Political and Cosmopolitical Economy,

Unquestionably the idea of a universal confederation and a perpetual peace is commended both by common sense and religion. ... All examples which history can show are those in which the political union has led the way, and the commercial union has followed. (List, 1841a, p. 123)

The unification of the Republic of the Seven United Netherlands, the USA, Germany, South Africa and now of the EU may be examples that counter this, since economic integration by way of transportation, trade and trade agreements had foregone political integration. But also in these cases political action have to some extent preceded or least paralleled economic results, as with the Coal and Steel Agreement in Europe and the Rome treaty.

The intentions of List should be obvious from these three chapter headings of his 1837 thesis called *The Natural System of Political Economy*:

- 7. *The Common Interest of all Manufacturing States in Free Trade*
- 25. *Transition from the Policy of Protection to the Policy of as much Free Trade as possible*
- 26. *How best to introduce and foster Free Trade*

As opposed to radical free trade revolutionaries or Cosmopolitans as List called them, List was a reformist in the matter of trade liberalisation. So was Smith, but without acknowledging the overall implications



of the infant industry argument since Smith showed little understanding of the immaterial factors of production and therefore of both the importance and the fragility of know-how and learning.

List argues that a universal union of nations should safeguard every nation's interests by legal provisions, but until this has been made a fact, every nation must take its own legal precautions. (Cf. List, 1841a, p. 181, see immediately below) and secure these national interests in the international community through law preceded by international trade congresses. List defended a gradual approach taking due consideration to the different circumstances, and accordingly different policies needed, of the various nations, and "but the solution of this problem is a work of immensely long duration",

The highest ultimate aim of rational politics is ... the uniting of all nations under a common law of right ... is to be attained only through the greatest possible equalisation of the most important nations of the earth in civilisation, prosperity, industry and power, ... but the solution of this problem is a work of immensely long duration. ... As yet, the apportionment of territory to the European nations does not correspond to the nature of things. ... If every nation was already in possession of the territory which is necessary for its internal development, and for the maintenance of its political, industrial, and commercial independence, then every conquest of territory would be contrary to sound policy, ... A just and wise apportionment of territory is, however, at this day not to be thought of... (List, 1841a, p. 410)

A radical free trade approach, consisting of a generalised deregulatory economic policy, does not consider the vastly different situations of the various nations. This policy will therefore always serve the established and strongest, List argues. Instead, a step-wise integration of the nations of the world, in line with the development of industry and trade guided by government policy, ought to be followed. He goes into detail of how to go about this in his *Natural System* (Cf. List, 1837a, especially ch. 26: *How best to introduce and foster Free Trade*, p. 125).

List called himself an adherent of the national principle as opposed to the global principle - or cosmopolitanism as List termed it.

But in my opinion his principle was more continental as with Hamilton. After Napoleon's Continental System, however, this phrase would be politically incorrect and rendered useless in political propaganda. On the other hand, in the German speaking nations, List is known as a liberalist. But as mentioned, List's opinion was that free trade only was a good idea as long as the threat of military wars and trade wars did not exist. As long as these did exist List advised regulatory remedies to suit the situation.

Although List saw national protection as a crucial economic instrument for the individual national economy, it was still only an instrument in order to reach the ultimate goal of universal free trade. (Cf. List, 1841a, ch. 11, p. 126) The difference between him and Smith on the issue of trade therefore narrows down to taking the different circumstances of nations into consideration and that these circumstances ul-

timately reflect different mental and socio-economic circumstances. Whereas Smith does not differentiate, List does.

## **7.28 A universal confederation of nations**

List was a child of a time dominated by cosmopolitan ideas, and wrote that so far few have understood the necessity of free trade,

So far there are only a few people, even in the most enlightened countries, who have grasped the fact that perpetual peace and universal free trade are both desirable and necessary. (List, 1837a, p. 31)

And in this he followed the influential philosopher Immanuel Kant, who Wilhelm Windelband refers to such,

And since history represents the outer social life of humanity, its goal is the completion of right and law, the establishing of the best political constitution among all peoples – a goal whose attainment, as is the case with all ideals lies at an infinite distance. (Windelband, 1893, p. 559)

List says that it would be unwise to act as if a universal union of nations existed, before it actually did, but this is what the Popular School requires,

In proportion, however, as the principle of a universal confederation of nations is reasonable, in just the same degree would a given nation act contrary to reason if, in anticipation of the great advantages to be expected from such a union, and from a state of universal and perpetual peace, it were to regulate the principles of its national policy as though this universal confederation of nations existed already. We ask, would not every sane person consider a government to be insane which, in consideration of the benefits and the reasonableness of a state of universal and perpetual peace, proposed to disband its armies, destroy its fleet, and demolish its fortresses? But such a government would be doing nothing different in principle from what the popular school requires from governments when, because of the advantages which would be derivable from general free trade, it urges that they should abandon the advantages derivable from protection. (List, 1841a, p. 181)

List argues that the first to promote free trade were the Physiocrats of the early 18<sup>th</sup> Century with which the term 'laissez faire' is associated.<sup>523</sup> List writes that just like the Physiocrats, Smith and Say did not deal with (national) political economy, but with Cosmopolitical economy - as if nations did not exist and instead a world government did exist,

---

<sup>523</sup> The term 'laissez nous faire' (leave us alone in doing our business) has, however, been attributed to the Dutch merchants in their heydays of the early 17 Century and also to French business men during the regime of Colbert.

Quesnay (from whom the idea of universal free trade originated) was the first who extended his investigations to the whole human race, without taking into consideration the idea of the nation. He calls his work 'Physiocratie, ou du Gouvernement le plus avantageux au Genre Humain,' his demands being that we must imagine that the merchants of all nations formed one commercial republic. ...

Adam Smith(1\*) treats his doctrine in a similarly extended sense, by making it his task to indicate the cosmopolitical idea of the absolute freedom of the commerce of the whole world in spite of the gross mistakes made by the physiocrats against the very nature of things and against logic. Adam Smith concerned himself as little as Quesnay did with true political economy, i.e. that policy which each separate nation had to obey in order to make progress in its economical conditions. He entitles his work, 'The Nature and Causes of the Wealth of Nations' (i.e. of all nations of the whole human race). He speaks of the various systems of Political economy in a separate part of his work solely for the purpose of demonstrating their non-efficiency, and of proving that 'political' or national economy must be replaced by Cosmopolitical or world-wide economy.'

Although here and there he speaks of wars, this only occurs incidentally. The idea of a perpetual state of peace forms the foundation of all his arguments. Moreover, according to the explicit remarks of his biographer, Dugald Stewart, his investigations from the commencement are based upon the principle that 'most of the State regulations for the promotion of public prosperity are unnecessary, and a nation in order to be transformed from the lowest state of barbarism into a state of the highest possible prosperity needs nothing but bearable taxation, fair administration of justice, and peace.' Adam Smith naturally understood under the word 'peace' the 'perpetual universal peace' of the Abbé St. Pierre.

J. B. Say openly demands that we should imagine the existence of a universal republic in order to comprehend the idea of general free trade. (List, 1841a, ch. 11, p. 119-120)<sup>524</sup>

Wilhelm Roscher mentions Fourier and Robert Owen as other supporters of a,

... universal confederate republic ... (Roscher, 1877, § LXVII)

James Steuart also touches upon the subject of a universal union, and List's debt to him is often overlooked, except by Kobayashi (Kobayashi, 1967). Steuart says that open trade is disastrous and can only take place under a universal monarchy,

Laying, therefore, trade quite open would have this effect; it would destroy, at first at least, all the luxurious arts; consequently, it would diminish consumption; consequently, diminish the quantity of circulating cash; consequently, it would promote hoarding; and consequently, would bring on poverty in all the states of Europe. Nothing, I imagine, but a universal monarchy, governed by the same laws, and administered according to one

---

<sup>524</sup> A tiny part of this quotation has been used in the section, *Power in international trade*, in chapter 6.

plan well concerted, can be compatible with an universally open trade. (Steuart, 1767, book 1, ch. xxix)

But in the meantime, Stuart advised protection of industry by privileges and prohibitions as the only way to establish new manufacture. List writes,

James Stewart says (Stewart, 1767, book 1. chapter xxix.): ‘In order to promote industry, a nation must act as well as permit, and protect. Could ever the woollen manufacture have been introduced into France from the consideration of the great advantage which England had drawn from it. If the king had not undertaken the support of it by granting many privileges to the undertakers, and by laying strict prohibitions on all foreign cloths? Is there any other way of establishing a new manufacture anywhere?’ (List, 1841a, ch. 29, p. 340, note 1)

List claimed that the teachings of Smith’s followers were more suitable for the internal affairs of a nation (seen as the universe) than for international affairs. But so long as some nations act according to national egotism, this is folly, List writes,

If the school represents the free competition of all producers as the most effectual means for promoting the prosperity of the human race, it is quite right from the point of view which it assumes. On the hypothesis of a universal union, every restriction on the honest exchange of goods between various countries seems unreasonable and injurious. But so long as other nations subordinate the interests of the human race as a whole to their national interests, it is folly to speak of free competition among the individuals of various nations. The arguments of the school in favour of free competition are thus only applicable to the exchange between those who belong to one and the same nation. Every great nation, therefore, must endeavour to form an aggregate within itself, which will enter into commercial intercourse with other similar aggregates so far only as that intercourse is suitable to the interests of its own special community. (List, 1841a, p. 172)

List argues that a universal union can only be developed gradually, and that the system of protection is the “most efficient means of furthering the final union of nations”, and “true freedom of trade”. National protection is therefore an instrument to reach the ultimate goal of universal free trade,

Only with the gradual formation of this union can free trade be developed, only as a result of this union can it confer on all nations the same great advantages which are now experienced by those provinces and states which are politically united. The system of protection, inasmuch as it forms the only means of placing those nations which are far behind in civilisation on equal terms with the one predominating nation (which, however, never received at the hands of Nature a perpetual right to a monopoly of manufacture, but which merely gained an advance over others in point of time), the system of protection regarded from this point of view appears to be the most efficient means of furthering the final union of nations, and hence also

of promoting true freedom of trade. And national economy appears from this point of view to be that science which, correctly appreciating the existing interests and the individual circumstances of nations, teaches how every separate nation can be raised to that stage of industrial development in which union with other nations equally well developed, and consequently freedom of trade, can become possible and useful to it. (List, 1841a, ch. 11, p. 126)

List says that we must expect other nations to hope that they can develop themselves by the same methods as those employed by the British, and not ideology can stop them from trying,

We would be prepared to agree with those economists if it were true that the nations concerned had decided to seek salvation under the supremacy of England and were prepared to surrender their rights as sovereign nations. In fact it is hardly to be expected that nations would do this even if one could convince them that England is really greatly superior to all other countries. If the existence of such an attitude can be proved - and it is certainly not universally held - then we must expect the French, Americans, Belgians, and other peoples to cherish the hope that they can promote their industrial, social, and political development by the same methods as those employed by the British. In that case no mere doctrine can be expected to prevent a country from adopting such a policy. (List, 1837a, p. 188)

In order to allow freedom of trade to operate naturally, the less advanced nations must first be raised by artificial measures to that stage of cultivation to which the English nation has been artificially elevated. (List, 1841a, ch. 11, p. 131)

List argues that the radical free traders' wish for rapid progress towards universal free trade would end in despotism. A universal republic with a geographically balanced economy is more likely if all nations are allowed to develop slowly. He argues that the various national oppositions to this radical policy,

... believe that humanity may make slower progress because of their protective commercial policies but they consider that their own economic advance will be more balanced than would otherwise be the case. The protection of national industries will enable states to preserve their freedom. The establishment of a universal republic will be much more likely if all the civilised countries in the world - followed in due course by nations which are at present relatively backward - were making uniform economic progress. This would be much better than a situation in which one country dominated all others in industrial and commercial power, because in that case a world trading monopoly and a universal despotism would have been established. (List, 1837a, p. 188)

## **7.29 From protection to free trade**

List argues that, although we all have an allegiance first to our nation and only then to the world of nations, still a time comes when all nations are capable of adopting free trade. In a transition period “a government should work out and announce in plenty of time a definite sliding scale for the reduction of import duties”. Moderate import duties will be allowed for revenue purposes. Export subsidies and export restrictions will not be allowed.

... our faith in humanity rests upon the solid basis of nationalism. .... We are citizens of a nation before we are citizens of the world. ...

A time comes when certain countries and regions are capable of adopting a policy of free trade instead of a policy of protection. We propose, however, that such countries should retain those import duties which are necessary to compensate manufacturers for the burden of taxation that they are expected to bear. The countries we have in mind are ...

To indicate to what extent List emphasised the need for legal arrangements in order to secure free trade in the longer perspective, a lengthy quotation is supplied in appendix 1d.<sup>525 526</sup>

### **7.30 Promote free trade by international law, treaties and congresses**

List calls his own contribution to the French Academy of Science's competition in 1837, “a somewhat daring suggestion”; a world congress to promote a world treaty on free trade,

The author considers that the explanatory memorandum attached to the question posed by the Academy<sup>527</sup> justifies him in putting forward his proposal for the holding of a world trade congress although this is admittedly a somewhat daring suggestion.

He hopes that he has paid proper attention to all the points raised in the Academy's memorandum:

Will it be possible to establish Free Trade in wartime as well as in peacetime by an international treaty which - however incomplete - could still be regarded as a great step forward in the progress of humanity? (List, 1837a, p.127)

---

<sup>525</sup> Reading the section, I am curious as to why List left out mentioning ‘industrial nations of the third rank’, which he mentions elsewhere. Perhaps he here included them in the category ‘industrial nations of the second rank’?

<sup>526</sup> Sections of this chapter has been quoted and commented in the section below; *Promote free trade by international law, treaties and congresses*

<sup>527</sup> 1. [List's note See Charles Dupin, “Sur le prix d'économie politique relatif aux moyens d'établir la liberté commerciale” (December 28, 1836), (Reprinted in F. List, *Werke* (Schriften Reden, Briefe) Vol. IV: *Das natürliche System der politischen Ökonomie*, 1837 (1971), pp. 39-44] (Henderson's note)

List was a staunch believer in legal arrangements in order to solve (national and) international trade disputes, and here argues that balanced treaties (with equal advantages) is an alternative to a European empire à la Napoleon,

There are only two ways by which Free Trade can be introduced. The first is to set up a world state like the European empire that Napoleon tried to establish. The second is for countries to conclude commercial treaties. Care must of course be taken not to conclude treaties by which one nation enjoys the oysters while another has to be content with the shells. Commercial treaties must give equal advantages to all the countries which sign them. All countries must secure guarantees for the future survival and prosperity of their industries.

France and the United States are two countries which would benefit greatly from the conclusion of a commercial treaty.<sup>528</sup> (List, 1837a, p. 125)

List attacks the radical free trade school for its resistance to commercial treaties, whereas List argues that they are the best way to gradually more free trade, although the historical experience thus far has been poor,

In conclusion, we must not omit here to make mention of commercial treaties based on mutual concessions of duties. The school objects to these conventions as unnecessary and detrimental, whereas they appear to us as the most effective means of gradually diminishing the respective restrictions on trade, and of leading the nations of the world gradually to freedom of international intercourse. Of course, the specimens of such treaties which the world has hitherto seen, are not very encouraging for imitation. (List, 1841a, p. 323)

List insists on balanced treaties, that agreements should not discriminate between the parties,

Commercial unions and commercial treaties are the most effective means of facilitating intercourse between different nations. But commercial treaties are only legitimate and valuable when they involve mutual benefits. They are injurious and illegitimate when the development of a manufacturing power in one country is sacrificed in order to gain concessions for the exports of its agricultural products to another country. These are “Methuen treaties,” or “lion-treaties.” (List, 1841b, *Introduction*, in Hirsch, 1909, p. 314-315)

In 1837, List argues as he did in his *Vienna Memorandum* (Cf. List, 1820, p. 546) that a world trade congress should be called to promote the introduction of free trade, and the task should be to pave the way

---

<sup>528</sup> 1. [List had long been interested in promoting trade between France and the United States. ....] (Henderson’s note)

for commercial and balanced treaties that respect the different stages of various nations,

To pave the way for the conclusion of advantageous commercial treaties a world trade congress should be convened at which all countries should be represented by experienced and well qualified experts. Such a congress should consider how the common interests of the various nations can best be served and how opposing interests could be reconciled. The congress should consider the varied interests of regions and societies at different stages of economic development – such as industrialised, agrarian, colonial, and primitive societies. It should examine the needs of countries which have reached the second or the third stage of industrial development in relation to the world's leading manufacturing country. It should consider the economic relations between two particular countries and between certain groups of countries. The deliberations of the congress would provide information to people all over the world concerning economic problems. This would encourage governments and legislative assemblies to adopt measures which would be to the advantage of all countries and it would enable governments to enlighten the citizens of all states on these matters.

It would, for example, be much easier for the British government to secure acceptance of the repeal of the Corn Laws if this measure were to follow discussions at a world trade congress. The discussions at the congress should cover all the matters mentioned in chapter 17. (List, 1837a, p. 126)<sup>529</sup>

List argues that the congress should promote free trade in raw materials (which would again reduce the need for colonies) and promote free trade on the seas, which would reduce the need for national navies. Thereby List actively “reduces” the most important reasons for criticism against his system,

These are topics which are of interest to all countries. The deliberations of the congress would throw light on the following topics – the advantages of universal free trade in raw materials and agricultural products; the advantages to be secured by all industrialised countries by agreeing to the imposition of uniform import duties on manufactured goods; the advantages of establishing common measures to secure universal peace, public order, and security of persons and property. Above all a world trade congress would facilitate the establishment of the freedom of the seas since it would give the lesser mercantile countries an opportunity to appreciate their real interest in this matter. (List, 1837a, pp. 126-127)

Uniform import duties on manufactured goods would serve to promote local production, reduce the need for transportation and promote more local diversity- and innovation in production. This again may improve the efficiency of the economic system. Likewise, efficiency would be improved when freedom of the seas would give smaller nations the

---

<sup>529</sup> Chapter 17 has the following headline: *Is it necessary to protect Agriculture and, if so, in what Circumstances?*



possibility of partaking in world trade – and in the global confederation of labour.

List suggests that France and the United States should take the lead in promoting a congress for a liberal trade policy, and England would then follow due to the advantages she would reap as well as due to her dependence on trade with America,

In chapters 7 and 8 we dealt with this aspect of the problem. We suggested that France and the United States should, in their own interests, take the lead in calling a world trade congress. There are reasons to believe that a suggestion of this kind would be supported by all the countries on the Continent. If these countries collaborated it can hardly be doubted that England, too, would send representatives to the proposed world trade congress, if only to keep abreast with what was happening. In chapter 7 we showed how powerful are the reasons which might make England decide to adopt a liberal commercial policy. Here we may add that England's cotton mills have now become very dependent upon the United States for their supplies of raw cotton. (List, 1837a, p. 127)

The European Continental nations and the United States have a common interest in free marine trade routes through the Middle East and worldwide,

All the Continental powers have especially a common interest that neither of the two routes from the Mediterranean to the Red Sea and to the Persian Gulf should fall into the exclusive possession of England, nor remain impassable owing to Asiatic barbarism. To commit the duty of protecting these important points to Austria, would insure the best guarantees to all European nations.

Further, the Continental powers in general have a common interest with the United States in maintaining the principle that 'free ships cover free goods,' ... (List, 1841a, p. 420)

List argues that free trade on the seas would reduce wars but is dependent upon acceptance of international law, also at sea,

The great principle of "free ships, free goods" has already been enunciated by Catherine the Great of Russia and by George Washington. But so far it has not been possible to secure the universal acceptance of this principle. It is obvious - proof is hardly required - that the universal acceptance and strict observation of this principle of international law would remove most of the disastrous consequences that war brings to all branches of industry. The author can see no way of achieving this aim unless the proposed doctrine of international law is universally accepted. (List, 1837a, p. 127)

List argues that if other sea-nations were able to force England to accept free trade on the seas, this could best be secured by a world trade congress. In the twentieth century England will want to promote free seas to check the arbitrary power of the USA,

If, however, there came a time when the maritime powers of the second and third rank were in a position to force England to accept the doctrine of “free ships, free goods” it could be done only if they collaborated closely. The best way to secure this co-operation would be through a world trade congress, as we have already proposed. Such a conference would be the simplest way of showing the nations on the Continent where their common interests lay. Even if the nineteenth century should pass without the doctrine “free ships, free goods” being generally accepted, the twentieth century will surely see its adoption.

When that time comes England will be the country to advocate the adoption of the principle and people will discuss how best to check the arbitrary power of the United States of America. (List, 1837a, p. 128)<sup>530</sup>

List argues that nations on different stages of development can trade with mutual benefits, where the less advanced nation supply the more advanced nation with coarser products,

On that account also, two nations which stand at different stages of industrial cultivation, can with mutual benefit make reciprocal concessions by treaty in respect to the exchange of their various manufacturing products. The less advanced nation can, while it is not yet able to produce for itself with profit finer manufactured goods, such as fine cotton and silk fabrics, nevertheless supply the further advanced nation with a portion of its requirements of coarser manufactured goods. (List, 1841a, pp. 324-325)

Nevertheless, List argues that trade and trade treaties are most beneficial when nations are equally well developed, simply because competition is then most just, balanced and efficient, as is the case among the nations on the European Continent,

Such treaties might be still more allowable and beneficial between nations which stand at about the same degree of industrial development, between which, therefore, competition is not overwhelming, destructive, or repressive, nor tending to give a monopoly of everything to one side, but merely acts, as competition in the inland trade does, as an incentive to mutual emulation, perfection, and cheapening of production. This is the case with most of the Continental nations. France, Austria, and the German Zollverein might, for instance, anticipate only very prosperous effects from moderately low reciprocal protective duties. Also, between these countries and Russia mutual concessions could be made to the advantage of all sides. (List, 1841a, p. 325)

### **7.31 Contradictions in List’s arguments?**

#### **a) A promoter both of protection and free trade?**

---

<sup>530</sup> The last part of this quotation have been used in the section above; *A European defence union*

The following quotations serve to prove List's seemingly contradictory positions regarding the first issue of protection versus free trade. It is clear that List himself understood that there was no contradiction in a larger setting. This point is made by quotations from List himself: Practically based protection in the short run serves the ideal of free trade in the long run.

That List was a Cosmopolitan, a free trader and a globalist at heart, should be obvious from the following quotations.<sup>531</sup> List champions,

... the cause of general free trade, by which Europe alone can reach the highest stage of civilisation. (List, 1819, p. 492)

The last point of his criticism against his own beloved industrial system as opposed to the *Mercantile* system (as he names it) was against its one-eyed nationalism that disregarded the necessity of free trade and the unification of nations. List thereby pays his respects to the agenda of his time, the Cosmopolitan- or Libertarian ideology,

7. That chiefly owing to its utterly ignoring the principle of cosmopolitanism, it does not recognise the future union of all nations, the establishment of perpetual peace, and of universal freedom of trade, as the goal towards which all nations have to strive, and more and more to approach. (List, 1841a, p. 341)

Chapter headings of his *Natural System* (Cf. List, 1837a) speak for themselves:

*The Common Interest of all Manufacturing States in Free Trade* (ch. 7),  
*Transition from the Policy of Protection to the Policy of as much Free Trade as possible*, (ch. 25) and  
*How best to introduce and foster Free Trade* (ch. 26)

Here List argues for free trade regulated by international law,

The great principle of "free ships, free goods" ... It is obvious- proof is hardly required - that the universal acceptance and strict observation of this principle of international law would remove most of the disastrous consequences that war brings to all branches of industry. The author can see no way of achieving this aim unless the proposed doctrine of international law is universally accepted. (List, 1837a, p. 127)

List accordingly argues for a world federation of free trade ruled by law. The issues of commercial free trade and political unification of nations under one law, had to be solved simultaneously, and that this is the highest aim of politics,

Thus the question as to whether, and how, the various nations can be brought into one united federation, and how the decisions of law can be in-

---

<sup>531</sup> Some of these quotations have been used elsewhere, in different settings.

voked in the place of military force to determine the differences which arise between independent nations, has to be solved concurrently with the question how universal free trade can be established in the place of separate national commercial systems. (List, 1841a, p. 114)

The highest ultimate aim of rational politics is ... the uniting of all nations under a common law of right (List, 1841a, p. 410)

List argues that free trade and respect for the law could only be accomplished through a world state by way of conquests or much preferably, through voluntary commercial treaties,

There are only two ways by which Free Trade can be introduced. The first is to set up a world state like the European empire that Napoleon tried to establish. The second is for countries to conclude commercial treaties. (List, 1837a, p. 125)

And arguing for a World Trade Organisation as a preliminary action, List writes that,

... the only satisfactory solution to the problem would be the establishment of world free trade.

Since we can hardly expect England of her own free will to make the concessions necessary to secure the establishment of a world customs union, it seems to us that the countries which have reached the second and third stage of industrialisation should form an association of their own to press for the establishment of world free trade which should be the common aim of all countries. (List, 1837a, p. 52)

Still he claims that,

Free trade is the fantasy of the merchants engaged in foreign commerce, (List, 1837a, p. 58)

Therefore, List was a Cosmopolitan free trade adherent on the one side and on the other hand also a protectionist and an economic nationalist. This is clear from the following quotation, where he argues in a paradoxical way that,

The system of protection ... appears to be the most efficient means of furthering the final union of nations, and hence also of promoting true freedom of trade. (List, 1841a, p. 126)

This seemingly contradictory stance is only understandable, by noting that power was unequally distributed internationally. Free trade could reign only when equality was established. This was the utopian dream. Until equality was reached, protection was the remedy - but multilateral agreements was a substitute.

List claims that history teaches us both that we approach universal political and commercial unity, but also that nations that underesti-

mate protection of its immediate interests, will perish (Cf. List, 1841b, *Introduction*, in Hirst, 1909, pp. 291-292).

## **b) More or less regulation? - State intervention versus free trade**

List also claimed, that with increased development comes more state intervention,

Statistics and history, however, teach, ..., that the necessity for the intervention of legislative power and administration is everywhere more apparent, the further the economy of the nation is developed. (List, 1841a, p. 172)

This would seem to be counter his claim that free trade is a necessity of future progress.

List therefore seemingly contradictory claims that with increased development there is a trend towards more state intervention (more regulation) on the one hand and on the other hand more free trade (less regulation).

Nevertheless, all this may be interpreted as both logical and historically correct: To harmonise List's claims, it would be necessary to differentiate between long-term trends nationally versus internationally. When List writes about more intervention, this concerns national issues. When he writes about freer trade, this concerns international issues.

Furthermore, we may differentiate between long-term trends in trade versus in other matters, which is of course possible. We would then, hypothetically according to List, have a long term trend towards more state intervention, but not in commerce, where the trend is towards less intervention.

This is also what has happened historically. The reason for more intervention generally is a natural and necessary result of growing and more complex societies and technologies - almost as a result of "natural" forces. Reduced intervention in trade, however, is a result of political- and economic interests and then finally a result of political decisions.

Nevertheless, since economic matters increasingly are interwoven, the issue and List's claims taken together is debateable. Different national health regulations are just one instance of a non-trade regulation that certainly may inflict with trade, and can be used deliberately for that purpose. Conversely, trade has important consequences for health, such as the spreading of disease, and harmful species of plants and animals. National security issues likewise have implications for trade and have been deliberately used in this regard.<sup>532</sup>

---

<sup>532</sup> This was the case when six US port management companies in 2006 were to be sold by P&O, a private British company, to DP World, a Dubai state-owned company. US authorities refused them from being sold, claiming national security.

Nevertheless, it is an historical fact that there is a trend towards more state intervention (more regulation) on the one hand nationally and on the other hand more free trade (less regulation) internationally.

---

ty as the reason. Security reasons were also used against the Chinese telecommunications companies Huawei and ZTE, to block them from delivering to US infrastructure (Cf. Wolf, 2012).

## 8.0 Summary of criticism and conclusion

### Contents

8.01 Summary of criticism	<b>503</b>
Some problematic issues are:	503
a) Trade and stability	503
b) Mercantilism and the British System	504
c) Colonies	505
d) Power	505
e) Finance	506
f) Regulation of interests	506
g) Motivation	507
h) Various	507
8.02 Conclusion	<b>508</b>

### 8.01 Summary of criticism

There are some issues in List's system that I and others find problematic and unsolved. They have been dealt with and discussed in the main text of the former seven chapters, and the following is therefore only a résumé.

#### Some problematic issues are:

##### a) Trade and stability

- 1) List promotes closeness and stability on the one hand and more efficient transport on the other hand. The problem is that the latter undermines the former. This inconsistent tension remains unresolved with List. To make sense of List's priorities here, he would have to claim that closeness takes priority over transport, thereby promoting only "necessary" transport, which is sound logistics and economics.
- 2) List promoted stability on the one hand, and on the other hand he also promoted trade liberalization, knowing full well that both of the latter undermine the former. This field of tension between "tradition and modernisation"; between tradition and stability on one side, and progress and dissolution on the other side, remains unresolved with List, but this is inevitable in a dynamic world. Nevertheless, as many other thinkers, List endeavoured to remedy these enduring conflicts through pragmatic policies, not getting to static ideological pre-scripts of 'protection' or 'free trade'. In his project he largely succeeded by pointing out some options that were elaborated upon - intensively and extensively - by his successors in Germany and else-

where, such as Tönnies, Durkheim and Simmel.

- 3) List promoted 1) self-sufficiency in the short to medium run, and 2) trade liberalization in the long run, especially with raw materials, while knowing full well that the latter undermine the former, also since nations specialize in their production due to e.g. economics of scale. List suggested that gradual liberalisation towards 'free trade', would overcome this "schism" and the necessity for national self-sufficiency.
- 4) List argued that the world gradually moved towards free trade, but he also argues that as nations mature and society gradually grows more complex, more state intervention is needed. Whether state intervention involves protection, is at all times a matter of definition. This is the case both in theory and in practical disputes between companies and between nations. - One example might be when Italian mobile phones were required to withstand minus 40 degrees temperature. US security requirements offer more examples.
- 5) List argued that universal free trade would be realised once all nations had reached an equal level of development. But since nations not only progress but also regress, and in unequal pace, the day of equality of all might never appear. Universal free trade is therefore unlikely to emerge, by economic federation first. In fact, List argues that this would be counter to historical experience. According to List, a universal federation must be political first, if it were to succeed. The present debt problems in the EU displays an example of (a yet unfinished) political union.
- 6) The American protectionists who largely followed List, such as Henry Carey and Simon Patten, tried to remedy inconsistencies in List's system, regarding in particular stability versus free trade. They chose to develop the American System into a system of permanent high protection, dismissing List's hope in a future of global free trade. Their contributions are, however, not a theme of this dissertation.

## **b) Mercantilism and the British System**

- 7) When discussing James Stewart's book and Mercantilism, List criticises the Industrial System for generalising protection and to encourage a prohibiting system of ineffective monopolies (Cf. List, 1841a, pp. 340-341) but this is somewhat unfair; even List was well aware that Mercantilists like Colbert also favoured domestic competition for instance by expanding infrastructure and removing internal barriers to trade: "The agricultural-manufacturing-commercial



State is like a city which spreads over a whole kingdom, ..." (List, 1841a, p. 339).

List in 1827 claims that the American System is opposed to the British System (List, 1827b, Letter I, pp. 17-19). But this reference to the British System concerns free trade, whereas, as List repeatedly points out, the original British System was a system of regulation; protection and Imperial self-sufficiency (Cf. Gipson, 1954, p. 25, and e.g. List, 1841a, chapter 4: *The English*).

### **c) Colonies**

- 8) List argued that it was essential that sovereign nation should acquire colonies, and therefore a merchant fleet to carry on trade with the colonies and an able navy to protect that trade. List also argues, however, that colonial products have no nutritional value and are goods suited for luxury consumption, such as sugar, tobacco, and spices.  
If Germany were to be self-supplied without colonies, her population would have to agree to dispense with colonial luxuries. That is an ex-post hypothetical question that cannot be answered a-priori in theory.
- 9) List can be criticised for promoting the colonial system of suppressing non-industrialised countries, but List argues that implementation of freedom of the Seas would remove the economic reason both for colonies and for navies. (List, 1837a, pp. 126-127) He may still be criticised, however for promoting colonisation and establishment of protectorates for benevolent reasons, intending to civilise less advanced nations. In this he has had many followers as recent world events show, particularly regarding "interventions" in "barbarous" countries, whether legitimised by UN Security Council resolutions or not.
- 10) List does not explain very well why a country in the torrid (hot tropical) zone, could not industrialise or re-industrialise. List's argument was not racist but that of climate. Accordingly he argued that Texas (settled with people from North-West Europe) was unfit for manufacturing (List, 1841a, p. 432). List argument was factually and empirically oriented as well as logical, but he has here been proven wrong.
- 11) In the case of East India, however, List mentions both industrialisation before British rule as well as the positive prospects (Cf. List, 1841a, p. 263, and p. 417), which both should contradict his "climate argument". Furthermore, List does not mention Indian resistance to British occupation. His attitude towards British policy towards India is lenient, and contrasts with List's indignant descriptions of British behaviour towards European nations.

### **d) Power**

- 12) List is somewhat wrong in writing that Smith totally excluded the power dimension, but may be more right when speaking of his followers (Cf. e.g. List, 1841a, chapter 4).
- 13) List has been criticised for being a forerunner for German aggression and expansionism (Cf. e.g. Neumann, 1942, pp. 104-106 and Earle, 1944, p. 141 n68, and p. 144). This is related to his promotion of the establishment of customs unions and railway construction, and in particular related to his promotion of the construction of able navies. These suggestions were part of List's strategy of developing Germany and the European Continent by copying the British success, and setting up a joint defence against British dominance. They were naturally but unfortunately seen as threats by that same camp. List suggested remedying differences, e.g. by introducing universal free seas and free trade as well as suggesting an alliance between Great Britain and Germany, but he was not successful in this pursuit.
- 14) List has been criticised for being a forerunner for German racism. (Cf. Tenenbaum, 1976, p. 8) This has been proven wrong (Cf. e.g. List, 1841a, p. 220 and 220n). This is a confusion of List's idealist nationalism with the later materialist nationalism and the latter's affinities to genetics and eugenics.

#### **e) Finance**

- 15) List's monetary analysis is intuitive and not very refined according to today's norms. But for his day his analysis is quite impressive. For instance, he is rather traditional, but he does not fall into the austerity traps that Adam Smith and his followers do. Instead, List's focus on building production capacity suits the problems of today's indebted countries well, tormented as they are by trade- and payments deficits as well as by financial crises.
- 16) List clearly understands that productive investment, such as in infrastructure, makes the whole economic system more efficient. Nevertheless, List omits mentioning the resulting non-inflationary character of productive investment, which today is another important argument for its construction.
- 17) Sometimes List explains State credit as a loan, where the State is a debtor. List grasps the concept of fiduciary money (List, 1841a, pp. 281-284), but does not take the step into promote it actively. Sometimes he thereby ignores the important alternative creation of public credit, utilising the State's legal monopoly of national money issuing.

#### **f) Regulation of interests**

- 18) Henderson criticises that List overstated the capability and power of governments to steer economic development (Cf. Henderson, 1983, p. 163), but this is not a valid reason to refrain from trying.

- 19) Henderson repeatedly criticises List for his condemnation of the merchant's role in industry (Cf. e.g. Henderson, 1983, p. 12), but List actually often defends the merchant for simply doing his job: "a merchant should not be criticised ... It is the nature of things that he must buy in the cheapest markets and sell in the dearest" (List, 1837a, p. 99).
- 20) List criticises England's landed interests for promoting agricultural protection, but he never came upon the idea that these interests could be compensated here and now, instead of risking bankruptcy now and an uncertain reward for List's policy advice in the future (Cf. List, 1841a, ch. 20: The Manufacturing Power and the Agricultural Interest, especially pp. 238, 240, 244, 247, 248, 250).
- 21) Similarly, List criticises Dutch merchant interests for promoting free trade with English manufactured goods, but he never came upon the idea that these interests could be compensated here and now, instead of risking bankruptcy now and an uncertain reward for List's policy advice in the future (Cf. List, 1841a, p. 407).

#### **g) Motivation and method**

- 22) List does not explain the concept of progress, so one is left with an impression that he adopted the general contemporary idea that advances in technology and organisation would largely go hand in hand with higher morals among peoples.
- 23) List's basic motive for human action remains basically the same as that of Adam Smith: Competition for social recognition, through amassment of material objects or social position. Admittedly, List is more refined in his economic sociology than the economists of the English Classical School, but the core is the same.
- 24) List's criticism of Adam Smith's individualism (Cf. List, 1841a, pp. 348-349) is too general, in the sense that in this criticism of methodological individualism, he does not explicitly differ between materialist and idealist points of view; as in individualism regarding consumption (related to e.g. private goods), versus individualism regarding production (related to e.g. creativity and public goods).
- 25) List's arguments for the positive effects of morality and religion; of Christianity and even more so Protestantism, is meagre and shallow. His argument is therefore somewhat doctrinaire, but also implicit.

#### **h) Various**

- 26) Britain's internal affairs is often painted in perhaps too rosy colours by List, with scant mention of conflicts. (See e.g. the section *Individual freedom and democracy*, in chapter 4.)
- 27) Henderson criticises List for his exaggerations concerning Smith, and for List's tendency to make "assertions without making much effort to show their correctness" (Cf. Henderson, 1983, p. 163), and is undoubtedly right.

## 8.02 Conclusion

Was Friedrich List's criticism of the Cosmopolitan School correct? Yes and no. List exaggerated, he knew it and he stated this in writing.

But it is slightly irrelevant whether the Classical was a scape goat for List or not. The most important point is whether List's analysis by itself was correct or not.

List was indeed correct in pointing out the importance of the immaterial factors. Development during the last few decades of "information revolution" has made it crystal clear that knowledge and communication are indeed front drivers of technological, social and economic development. Furthermore, research into the importance of matters related to e.g. business stability and social trust, supports List's emphasis on morality and stability.

List was also correct in pointing out that the Cosmopolitan School largely had ignored the immaterial factors. He was also correct in claiming that this had serious consequences for the understanding of how social- and international economies work and how they may be arranged to produce the best results.

On the other hand List was not alone in pointing out these matters, just as Hegel was not alone in his pursuits. Therefore, Adam Müller is among those who deserves more credit and fame than he hitherto has received.

More specifically, List deserves great credit for revealing the materialistically based errors of Adam Smith's theory of capital and growth, which was the basis for Smith's theory of trade (Cf. also Cannan, 1921 and Levi-Faur, 1997). Furthermore, there are also good reasons to value Friedrich List's defence of the Mercantilist standpoint against Adam Smith's scoffing: The balance of trade matters – for financial stability and for sovereignty.

List's explained that a national currency is backed by its power of production, in essence its mental powers. A government should expand its volume of currency in pace with the growth of industry, and in order to strengthen sovereignty he promoted credit to be channelled into productive investment, especially into infrastructure. He thereby contributed to the theory of productive credit creation by the state, which was further developed in theory and was practiced a century later (Cf. Backhaus, 1985 and Klausinger, 1985).

List's remedy for countries with trade and payment deficits, as well as for those countries that did not desire to experience this sorry destiny, was to strengthen the powers of production in order to improve the national competitiveness. Therefore, as Christopher Freeman pointed out, List's system might as well have been called the *National System of Innovation* (Cf. Freeman, 1982).

Was Friedrich List's system coherent? Yes, in general I think it was, with some important exceptions noted above.

Was Friedrich List's system of lasting importance? Yes, in general I think it was, with some important exceptions noted above. The reason is that he pointed out the relativity, not of values themselves, but rather the relativity of their practical implementation: He was pragmatic. His system was therefore dynamic in the sense of being able to adapt to changed circumstances.

In sum, List basically argued that the immaterial factors of production were decisive in economics, and that political economy therefore fundamentally is a historical and cultural science. In my view, List's most important accomplishment was this profundity of his quite coherent and dynamic system.

# Appendix 1

## The Logic of List

### List's logic: Goals and measures

The logic of List's argument for national economic policies:

**1) Ultimate goal:** Elevation of human civilisation globally

**2) Conditions and sub-goals** of importance (all motive- / incentive oriented):

- A) Freedom - for creativity and know-how
- B) Morality<sup>533</sup> - for communal progress and predictability of investments<sup>534</sup>
- C) Wealth – allowing freedom and morality to flourish

### 3) Measures

#### A) National

- 1) General
  - a) Gradual and pragmatic reforms
  - b) Differentiated system of regulations and trade
- 2) Practical
  - a) Security for civil liberties and property
  - b) Policies<sup>535</sup> that spur investments into strategic branches<sup>536</sup>
  - c) Distribution of demand that balances production

#### B) Global

- 1) General
  - a) Gradual and pragmatic reforms
  - b) Differentiated system of trade, approaching free trade
- 2) Practical
  - a) World Trade conferences
  - b) World Trade Organisation

---

<sup>533</sup> Including trust, stability, and order, as well as endeavour and precision.

<sup>534</sup> Both immaterial and material

<sup>535</sup> Including regulations, taxation and other incentives.

<sup>536</sup> E.g. education, research, infrastructure, energy, machine tool production

c) World Government

## **The Logic of List's Productive forces**

Theses on: Elevating Labour and Culture: Friedrich List's International System for Competition and Mutual Progress

List: The setting for political economy is,  
An international economic system of competing nations.

The trigger for List's efforts is a failure to compete; Crisis and social despair:

Germany's poverty and emigration, and US twin deficits, national debt, and repeated crises in banking and industry.

## **Theses on List's system:**

### **In short**

The free human spirit creates progress through public regulation of incentives, elevating the quality of Labour and culture:

### **More elaborated:**

- 1) List's goal is a "progress" that elevates global civilisation.
- 2) The ultimate source of progress is the human spirit,
- 3) – which constitutes and reshapes the mental capital.
- 4) – "– collaboration.
- 5) – "– nation.
- 6) The ultimate collaboration lies in true global free trade.
- 7) List's diagnosis is lacking competitive power.
- 8) List's remedy is to elevate the quality of labour,  
by regulating incentives, giving investment into strategic  
branches.

### **Concluding lesson:**

Economic progress is only achieved by cultural progress.

Or in more popular terms:

"Use your brains; bring your house in order and get creative & productive!"

Today's crisis in the industrialised world illustrates this lesson's acuteness.

## **In some detail:**

### **THEORY**

(Economic sociology)

- 1) List's goal is "progress"; elevating global civilisation, by improving individual freedom and morality, giving creativity, predictability and prosperity: England was his model.  
□: "Fortschritt" = "step forward", advance – not material "growth".
- 2) The ultimate source of progress is the individual's spirit, which yearns for freedom, social recognition and – advancement,  
- inequality is a spur.
- 3) The human spirit constitutes and continuously reshapes mental capital; individual & collective; intergenerational & accumulated; "Geisteskapital".

I.e. "human capital"; knowledge, know-how, skill, innovation - and institutions; social networks and –traditions; religion, morality, trust, jurisdiction, and credit, Counter-factual: Reconstruction problems in archaeology, finding material artefacts only.

- 4) Mental capital constitutes and reshapes collaboration; the on-going confederation of labour (CL):
  - A. CL reaches its furthestmost potential in an urban-industrial civilization (UIC), which only develops well through,
    - i. Carefully balanced development of all vital sections of agriculture, industry and trade - with priority to production over finance;
    - ii. Establishment of efficient communication (of ideas etc.),
      - a) State of the art institutions, regulations, common standards  
(e.g. grammar).
      - b) Towns - and emulation of the density of towns by,
      - c) Transport: Physical and communicative; media.
  - B. An UIC elevates civilisation by demanding high-quality,
    - i. Labour with a high moral standard, well-educated and -skilled,
    - ii. Conditions of work, dwelling and livelihood.  
General welfare and social security promote high morality and –skills.
- 5) CL constitutes and continuously reshapes the Nation, both its civic institutions, markets and the public administra-



tion;

- A. The Nation is the main vehicle for the individual's; freedom, happiness and prosperity, delivering collective services that an individual cannot,
    - i. Traditions, such as in institutions, culture and the arts.
    - ii. Improvements of major infrastructure; security, health, education, research, transport and communication.
  - B. The Nation resembles a large factory; a national system of innovation and production.
- 6) The ultimate CL lies in true global free trade, which
- A. Constitutes an international collaborative system of innovation and production.
  - B. Makes obsolete the selfish colonial system as well as navies;
- 7) List's diagnosis (e.g. Germany, USA) is a lack of (national) competitive power /productive force (poor mental and material capital = low quality of Labour).
- 8) List's remedy is to elevate the quality of labour, by public regulation of incentives, giving investment into strategic branches.

## **PRACTICE**

(Political economy)

### **I. ADMINISTRATIVE POLICY;<sup>537</sup>**

- "Bring your house in order"

- 1) Public regulation - pragmatic promotion of improved common standards: Jurisdiction,<sup>538</sup> -defence, and -infrastructure, etc., - in particular:
- A. Property rights (e.g. security, patents and other semi-monopolies).
  - B. Know-how: Education, training and research
  - C. General welfare: Health; conditions of work, dwelling and livelihood.
  - D. Immigration of resourceful Labour; skilled, trustworthy, enterprising
  - E. Information: Conferences, -journals and -propaganda.
  - F. Excellence: Establishment of exhibitions, competitions, and prices.

---

<sup>537</sup> All these in the Mercantilist /Cameralist tradition.

<sup>538</sup> E.g. injunctions, prohibitions.

## II. FISCAL- AND MONETARY POLICY:<sup>539</sup>

- “Get creative and productive!”

2) Strategic taxation policies (e.g. fees, tariffs, subsidies, grants, tax credits).

The order of importance of their task is,

A. Promote stability, using pragmatic protection.<sup>540</sup>

B. Restructure business and industry<sup>541</sup>, and differentiate according to,

i. Situation: Historical setting / stage of development -

List: “infant industry”, involvement of employment and necessary consumption.

ii. “Strategic” role of a branch:

a) “Key”; necessary for other branches,

especially machine tools, energy, and infrastructure.<sup>542</sup>

b) “Attractive”; giving higher development and -value creation in the long-run; commanding higher prices due to difficult production.

- List: involvement of better skills, and -machinery.<sup>543</sup>

C. Provide security for e.g. foreign investors,

Capital, technology, and spirit of enterprise.<sup>544</sup>

D. Fiscal income (tax revenue)

3) Create public money and -credit

- directed to strategic activities and branches.

“Productive Credit Creation” tradition; Hildebrand, Lautenbach etc.

---

<sup>539</sup> Cf. “Hamiltonian” legacy - directing resources - with Listian “immaterial” twist.

<sup>540</sup> Mental capital is a fragile capacity and network, and needs to be wisely nurtured and protected against the gusts of the world markets.

<sup>541</sup> The ability to learn offers the opportunity to enter and expand in “new” strategic and attractive branches - as opposed to the static and “monocultural” results of “competitive advantages”: “Stick to one’s last.”

<sup>542</sup> Basic education, technical schools, research, health, transport, communication, and credit system. E.g. innovative transport, List: telegraph and electromagnetic propulsion, and in our days; ICT (being both machine tool and infrastructure) and APM/PRT (automated transport).

<sup>543</sup> “more profitable employment”, Luxury products elevate quality (cf. Colbert) - competition on quality (Germany today) as opposed to competition on price.

<sup>544</sup> Cf. Sergei Witte’s and Sun Yat-sen’s legacy:

“it is my idea to make capitalism create socialism in China” (1922).

- Cf. point 1 F3 above, on immigration.

- 4) Ensure favourable interest rates – directed ...
- 5) Create state investment - directed ... (e.g. shares in private equity)
- 6) Regulate consumption - to match production - securing uninterrupted stability in home markets. Prevent hoarding.

### III. INTERNATIONAL POLICY:

(In the international competition and power game);

- 7) Promotion of true international free trade through,
  - A. Temporary protection in developing nations, increasing,
    - i. Long term global competition and -efficiency<sup>545</sup>
    - ii. Demand for enhanced products from developed countries<sup>546</sup>
  - B. World Trade conferences
  - C. World Trade treaties - promoting larger trading areas to counter monopoly tendencies and inefficiency
  - D. World Trade Organisation
  - E. World Government (global rule of law)

### CONCLUDING LESSON

Economic progress will only be achieved along with cultural progress:

Economic progress presupposes, accomplishes and is accompanied by outer- and inner cultural progress.

□: An industrial revolution goes hand in hand with a cultural revolution, also among nations.<sup>547</sup> Economic advance therefore calls for a gradual and careful development of high morality and – skills; individually, collectively and internationally.<sup>548</sup>

Or again, in more popular terms,

“Use your brains; bring your house in order and get creative & productive!”

Today’s crisis in the industrialised world illustrates this lesson’s acuteness.

---

<sup>545</sup> The ‘Infant Industry’ argument - as opposed to contemporary English monopoly.

<sup>546</sup> Due to increased buying power in developing nations

<sup>547</sup> England’s contemporary dominance had to stop.

<sup>548</sup> E.g. Europe’s cultural revolution started in earnest with the Reformation / Renaissance – work discipline, exploration; science etc.



## Appendix 2

### Index of List's treatment of various issues

List elaborated his system of strategic investment and differentiating (temporary) tariffs.

#### **a) Policies in general:**

- 1) The need for stability and uninterrupted production (Cf. List, 1841, pp. 294, 298);
- 2) Protection and importance of home market (Cf. List, 1841, pp. 24, 186-187, 191);
- 3) Incentives and security for the investor (Cf. List, 1837a, p. 89, List, 1841, pp. 167-168, p. 426);
- 4) Trade wars and dumping (Cf. List, 1841, pp. 95, 146-147, 299).

#### **b) Strategic investment into key branches:**

- 1) Education (Cf. List, 1827d; List, 1837a, pp. 119 and 66-67; List, 1841a, pp. 139, p. 200, 203-204 and 386-387; List, 1841b, p. 179, 315);
- 2) Science (Cf. List, 1837a, pp. 64-69, and 79; List, 1841a, pp. 48, 128-129, and 200);
- 3) Transport (Cf. List, 1837a, pp. 116-117; 136-137; List, 1837b, in general but especially e.g. p. 67; List, 1838 in general but especially e.g. pp. 2 and 7; List, 1841a, pp. 49, 116-117, 200 and 323);
- 4) Energy (Cf. List, 1837a, pp. 62 and 136-137; List, 1837b in general; List, 1838 in general);
- 5) Machine tools (Cf. List, 1837a, p. 117; List, 1841a, pp. 151 and p. 314);
- 6) Key branches that supply input factors for other branches (in addition to the five mentioned above), such as pig iron (List, 1837a, pp. 116-117)

**c) Differentiated tariffs according to:**

- 1) Stability task of tariffs primary (Cf. List, 1827b, p. 111; List, 1837a, pp. 32-33; List, 1841a, p. 294 ff: *Chapter 24: The Manufacturing Power and the Principle of Stability and Continuity of Work*);
- 2) Structural task of tariffs secondary; education tariff promotes skills (i.e. 'infant industries') (Cf. List, 1827b, pp. 48-49; List 1841a, p.111);
- 3) Fiscal task of tariffs 'tertiary' (Cf. List, 1837a, p. 36);
- 4) Higher value added (Cf. List, 1837a, pp. 116-117);
- 5) Necessity of averting inefficient monopolies (Cf. List, 1837a, p. 81, 1841, pp. 81, 169-171);
- 6) Historical setting (Cf. List, 1837a, p. 145, 1841, p. 115, 130, 314, 329);
- 7) Time, i.e. a bell shape of tariffs along time axis (Cf. List, 1837a, pp. 115; 145, 1841, p. 314);
- 8) Special key branches with skill, experience (Cf. List, 1837a, p. 145, List, 1841, pp. 178-179);
- 9) Special key branches with machinery, capital involved (Cf. List, 1837a, p. 145, List, 1841, pp. 178-179);
- 10) Special key branches like machine tool industry (Cf. List, 1841, p. 314);
- 11) Special key branches supplying necessity of life, i.e. articles of general consumption (Cf. List, 1841, p. 311);
- 12) Large home market and potential for success. (Cf. List, 1837a, p. 115);
- 13) Special key branches supplying employment (Cf. List, 1841a, p. 179);
- 14) Not protect low-wage labour-intensive industries (as long as there is alternative employment) (Cf. List, 1837a, p. 116);
- 15) Necessity of state credit and interest free loans as a kind of subsidy or negative tariff (Cf. List, 1841, pp. 296, 300, 315);
- 16) State investments into infant industry (e.g. as shares of equity capital), interest free loans, preferential interest rates to the investors (Cf. List, 1841, pp. 117, 315);
- 17) Temporary subsidies to promote infant industry (Cf. List, 1841, p. 315).

## Appendix 3

### Larger quotations from Friedrich List

The subheadings below are borrowed from the respective sections of the main text, where smaller extracts of these quotations are used.

#### 2.21 English Nominalism versus List's Realism

The more I am convinced of the superior talents and of the great learning of President Cooper, the more I am astonished to see him build up on such false ground, a system of political economy, by which he intends to enlighten a whole nation about its interest and to prepare the youth of that nation for political life; a system which would lead this nation to ruin, to suicide. A few words are sufficient to expose the gross error in which Mr. Cooper fell in this fundamental phrase, blinded by his zeal for keeping up the old theory. Mr. Cooper confounded a *grammatical being with a moral being*, or what the civilians call a moral person (a chartered society, a plurality of men, possessing common rights and obligations, common interests and institutions). A grammatical being is a mere name, signifying different things or persons, being only united in the use of language, in order (as Mr. Cooper says) to avoid limitations, descriptions, etc. The names bar, yeomanry, mob are such grammatical beings; the persons denoted by this name possess neither social rights nor social obligations; they cannot prosecute a law suit under this name before a court, nor can they be accused. But the American nation can, as Mr. Cooper may learn from the title of many indictments. A being which elects presidents and representatives, which possesses a navy, land, and debts; which makes war and concludes peace; which has separate interests respecting other nations, and rights as well as obligations respecting its members, is not a mere *grammatical contrivance*; it is not an inert grammatical being; it has all the qualities of a *rational being* and real existence. It has body and real possessions; it has intelligence, and expresses its resolutions to the members by laws, and speaks with its enemy not the language of individuals, but at the mouth of cannon.

With this false foundation the whole system of Mr. Cooper falls to pieces. In vain are his ingenious reflections and parallels, in vain all his learned allegations; common sense rejects his reasoning, as emanating from a false principle. It is a very instructing contemplation, to see a man of such superior talents build up a system of political economy on a ground which, as a lawyer and philosopher, and as a learned politician, he must condemn. What

would Mr. Cooper, as Attorney-General, have said, if the counsel of a defendant had opposed to one of his indictments, that the American nation is a mere grammatical being, a mere man; which only by the contrivance of man is converted into an existing and intelligent being, and which therefore cannot prosecute a lawyer before a court?

Very respectfully, your most humble, obedient servant,  
FR. LIST. (List, 1827b, p. 89)

### **3.07 Counterproductive saving**

“He has not taken into account, that by the policy of favouring native manufacture a mass of foreign capital, mental as well as material, is attracted into the country.

He falsely maintains that these manufactures have originated in the natural course of things and of their own accord; notwithstanding that in every nation the political power interferes to give to this so-called natural course an artificial direction for the nation's own special advantage.

He has illustrated his argument, founded on an ambiguous expression and consequently fundamentally wrong, by a fundamentally wrong example, in seeking to prove that because it would be foolish to produce wine in Scotland by artificial methods, therefore it would be foolish to establish manufactures by artificial methods.

He reduces the process of the formation of capital in the nation to the operation of a private rentier, whose income is determined by the value of his material capital, and who can only increase his income by savings which he again turns into capital.

He does not consider that this theory of savings, which in the merchant's office is quite correct, if followed by a whole nation must lead to poverty, barbarism, powerlessness, and decay of national progress. Where everyone saves and economises as much as he possibly can, no motive can exist for production. Where everyone merely takes thought for the accumulation of values of exchange, the mental power required for production vanishes. A nation consisting of such insane misers would give up the defence of the nation from fear of the expenses of war, and would only learn the truth after all its property had been sacrificed to foreign extortion, that the wealth of nations is to be attained in a manner different to that of the private rentier.

The private rentier himself, as the father of a family, must follow a totally different theory to the shopkeeper theory of the material values of exchange which is here set up. He must at least expend on the education of his heirs as much value of exchange as will enable them to administer the property which is some day to fall to their lot.



The building up of the material national capital takes place in quite another manner than by mere saving as in the case of the rentier, namely, in the same manner as the building up of the productive powers, chiefly by means of the reciprocal action between the mental and material national capital, and between the agricultural, manufacturing, and commercial capital.

The augmentation of the national material capital is dependent on the augmentation of the national mental capital, and vice versa.

The formation of the material agricultural capital is dependent on the formation of the material manufacturing capital, and vice versa.

The material commercial capital acts everywhere as an intermediary, helping and compensating between both.” (List, 1841a, pp. 227-228)

### **3.30 Public regulation of the merchant interest**

... we wish to guard against any suggestion that we have failed to be objective by stating categorically that we fully appreciate the importance of commerce for the development of a country’s productive powers and cultural progress.

It is by commerce that new products appear on the market and that new demands for consumer goods are created. To secure these goods primitive peoples become accustomed to work and this in turn leads to progress in morality, religion and law. It is the merchant and not the missionary who stimulates backward primitive peoples in their advance towards a more civilised existence.

It is the merchant who fosters the development of agriculture which, but for his efforts, would continue to languish in the most miserable fashion. It is he who prepares people to enter a new stage of economic and social existence. It is his efforts which strike at the very roots of prejudice, fanaticism, physical and intellectual idleness, the harmful privileges of nobles, and the arbitrary rule of despots. He gives primitive peoples the will and the ability to improve themselves, because he provides them with new goods and so awakens in them the desire to make these goods themselves. He also provides them with the means to introduce and to develop their own domestic industries. (List, 1837a, p. 98)

“A merchant would have no scruples in selling factories to foreigners. In the event of a slump a merchant - true to the principle of buying in the cheapest market and selling in the dearest - would be quite capable of raising capital by selling an industrial enterprise in his own country and using the money by buy cheaply in a foreign country goods that their owners were forced to sell as trade was depressed. The merchant could then dump these goods in his

own country and condemn thousands of workers to unemployment and starvation. The tragic consequences of his actions would cause him little concern. As a supporter of the theory of value he carries on his business with the sole object of making a profit at the end of the year. If he feels it necessary to excuse his conduct he resorts to a platitude and simply argues that the misfortunes that he has helped to bring about are due to circumstances beyond his control.

If he cannot profit from his country's prosperity a merchant will speculate on its misfortunes such as famine or war. He profits from the export of beasts essential for farming. He profits from the sale of the machinery and stock of bankrupt industrial enterprises. He profits from the emigration of factory managers, and unemployed urban and rural workers. He even profits from the sale of arms to his country's enemies. He speculates and makes money by engaging in all these dubious activities. He poisons entire nations and communities with his brandy and still continues to proclaim his adherence to the policy of "*laissez faire et laissez passer*". ...

It is in the very nature of things that a merchant should defend absolutely unrestricted freedom of trade in this way, even if his actions are utterly at variance with the interests of commerce in general. If a fox were a member of a legislative assembly he would protest that it would be an infringement of natural law to pass a bill forbidding the consumption of poultry and pigeons.

The merchant appeals to "natural law" to condemn anything which hampers his business. He thinks that there is nothing wrong in a man of honour engaging in smuggling. Indeed he actually flatters himself that contraband trade is a proper and honourable way of enforcing the "natural law" that society has broken.

To such an extent are merchants debased by their determination to make a profit at any cost that not only individuals but groups of merchants - such as shipowners, shipbuilders, and insurance companies - will unite to make money out of the thousands of people and the millions of francs worth of goods that are lost at sea every year. These men are thieves and robbers.

It will need the intervention of a statesman of high character to ensure that any clash of interests between the mercantile community on the one hand and a nation, society, or humanity on the other is resolved in favour of the latter.

It has been repeatedly observed that merchants engaged in foreign trade will inevitably side with their country's enemies as soon as they see that such a course of action will benefit them financially.

A merchant, unlike a philosopher, is no citizen of the world. If his own country sinks into a wretched and shameful state of bankruptcy and slavery, a merchant will take himself off to a foreign country with all his possessions. Merchants deserted Venice, Por-

tugal, and the Hansa Towns as soon as these states declined. Adam Smith has no illusions concerning the behaviour of merchants (see Book III, chapter 4).

Measures of state control designed to maintain the quality of manufactured goods which are exported are advantageous to commerce in general but they are detested by individual merchants who complain bitterly of any interference in their business and reiterate their demand for a policy of "laissez faire et laissez passer". Commerce in general obviously benefits from canals and railways and merchants normally are strongly in favour of their construction. But he loses all interest in the project as soon as he becomes a shareholder in a canal company or a railway company. Now he is interested only in making a profit from a rise in the value of his shares." (List, 1837a, pp. 100-101, footnote omitted, with reference to Adam Smith. It may be found in the section in chapter 3)

#### **4.26 Confederation of labour**

"The school is indebted to its renowned founder for the discovery of that natural law which it calls 'division of labour,' but neither Adam Smith nor any of his successors have thoroughly investigated its essential nature and character, or followed it out to its most important consequences.

The expression 'division of labour' is an indefinite one, and must necessarily produce a false or indefinite idea.

... on the other hand, may be called with equal correctness a union of labour; ...

The essential character of the natural law from which the popular school explains such important phenomena in social economy, is evidently not merely a division of labour, but a division of different commercial operations between several individuals, and at the same time a confederation or union of various energies, intelligences, and powers on behalf of a common production. The cause of the productiveness of these operations is not merely that division, but essentially this union. Adam Smith well perceives this himself when he states, 'The necessities of life of the lowest members of society are a product of joint labour and of the co-operation of a number of individuals.'<sup>(1)</sup> What a pity that he did not follow out this idea (which he so clearly expresses) of *united labour*.

If we continue to consider the example of the pin manufacture adduced by Adam Smith in illustration of the advantages of division of labour, and seek for the causes of the phenomenon that ten persons united in that manufacture can produce an infinitely larger number of pins than if every-one carried on the entire pin manufacture separately, we find that the division of commercial

operations without *combination of the productive powers towards one common object* could but little further this production.

In order to create such a result, the different individuals must co-operate bodily as well as mentally, and work together. The one who makes the heads of the pins must be certain of the co-operation of the one who makes the points if he does not want to run the risk of producing pin heads in vain. The labour operations of all must be in the proper proportion to one another, the workmen must live as near to one another as possible, and their co-operation must be insured....

The popular school, because it has regarded the division of operation alone as the essence of this natural law, has committed the error of applying it merely to the separate manufactory or farm; it has not perceived that the same law extends its action especially over the whole manufacturing *and agricultural power, over the whole economy of the nation.*

As the pin manufactory only prospers by the confederation of the productive force of the individuals, so does every kind of manufacture prosper only by the confederation of its productive forces with those of all other kinds of manufacture. For the success of a machine manufactory, for instance, it is necessary that the mines and metal works should furnish it with the necessary materials, and that all the hundred different sorts of manufactories which require machines, should buy their products from it. Without machine manufactories, a nation would in time of war be exposed to the danger of losing the greater portion of its manufacturing power.

In like manner the entire manufacturing industry of a State in connection with its agricultural interest, and the latter in connection with the former, will prosper the more the nearer they are placed to one another, and the less they are interrupted in their mutual exchanges with one another. The advantages of their confederation under one and the same political Power in times of war, of national differences, of commercial crises, failure of crops, & c., are not less perceptible than are the advantages of the union of the persons belonging to a pin manufactory under one and the same roof.

Smith affirms that the division of labour is less applicable to agriculture than to manufactures. (2)<sup>1</sup> Smith had in view only the separate manufactory and the separate farm. He has, however, neglected to extend his principle over whole districts and provinces. Nowhere has the division of commercial operations and the confederation of the productive powers greater influence than where every district and every province is in a position to devote itself exclusively, or at least chiefly, to those branches of agricultural production for which they are mostly fitted by nature." (List, 1841, ch. 13, pp. 149-151)

## 6.18 Common interest in free trade

### CHAPTER SEVEN

#### The Common Interest of all Manufacturing States in Free Trade

IN THIS CHAPTER we shall show that even in industrial nations there is no need - or very little need - to give tariff protection to the production of raw materials and foodstuffs, save under quite exceptional circumstances.

Moreover we have already given at any rate partial proof of the fact that many countries would be well advised to be content with a purely agrarian economy. This is desirable on the assumption that no restrictions are placed either on exporting farm products to industrial states or on importing manufactured goods from industrial states.

Experience shows that the barbarous or semi-barbarous peoples of Asia, Africa, and South America who have become civilised most quickly have always been those whom the industrialised states have provided with stable administrations, protection for persons and property, and freedom of trade. In this way backward peoples have been given the opportunity of securing manufactured goods cheaply and of selling their own products to the best advantage. Here is a great opportunity to apply the principles of the doctrine of cosmopolitan economics in a practical way. Far from injuring any country this would bring together the special interests of every nation in a valuable common enterprise.

It might, at first sight, appear to be asking too much to expect England to open her colonies to the commerce of all nations and to renounce the advantages to be gained by using her sea power to force distant backward countries - such as the states of South America - to submit to treaties which give her commercial privileges in their markets.

This is very important for the future prosperity of both advanced countries and backward and barbarous peoples. If one regards the matter from a more elevated standpoint than the sordid view taken by a merchant eager to enjoy the fruits of a monopoly, it will be seen that the introduction of the greatest possible freedom of trade would benefit not only the states in the second and third phases of industrialisation but would confer upon England greater advantages than upon anyone else.

The example of the United States shows how a country that was formerly of no importance in world trade, is able to confer great benefits upon all countries by developing her agriculture and by making great progress from an economic and social point of view. The same example illustrates the point that industrial states can promote the expansion of shipping, commerce, and manufacture'

much more by opening their overseas possessions to the trade of all nations than by monopolising the commerce of their colonies. The most advanced countries in Europe and North America have the greatest possible interest in fostering the opening up and the progress of civilisation in all parts of South America, Africa, Asia and Australia. In doing so they will enormously increase their exports of manufactured goods, their imports of foreign products, their transit trade, and their shipping.

On the other hand nothing has proved to be a greater hindrance to the progress of civilisation in backward lands than the selfish and greedy policy pursued by various rival nations in different part of the world. Advanced nations have tried to gain complete control over colonies, or exclusive influence over the administration of backward regions. Sometimes they have gained special trading rights by signing commercial treaties with the rulers of backward territories. Instead of adopting such policies, all the advanced industrial countries in the world should adopt the principle of free trade and equal rights in South America, Asia, Africa, Portugal, Spain and the Two Sicilies. A liberal policy of this kind would strike at the very root of the evil of economic selfishness. It would without doubt lead to a situation in which all industrial nations would be happy to see any one of their number undertake the task of bringing progress to barbarous peoples.

Thus England would only gain if France proclaimed a protectorate over all North Africa or if Germany embarked upon the task promoting the progress of civilisation in Turkey and the Levant. It would be mutually beneficial to all advanced nations if their surplus populations could make use of their skills in these territories.

Thus England's gains would be far greater than her losses because the united manufacturing power of all the industrialised countries would be far more effective than the isolated industrial power of England alone, especially if that power were hampered by the envious rivalry of other states.

It is obvious that the United States is developing into a maritime power which before long will inevitably surpass that of England. It is equally obvious that the economic interests of Canada will one day be identical with those of the United States. England would in these circumstances be well advised to give up voluntarily a supremacy that cannot in any case survive for very long. And when another nation becomes the dominant economic country in the world England will find this predominance as irksome and as unpleasant as England's dominant position is for other people today. Consequently in her own interest England should now be prepare to share her dominant position with other advanced industrial countries and should agree to the establishment of a hegemony which would secure for her advantages which would be both more substantial and longer lasting than those which she at

the present enjoys. Moreover new inventions - in transport and armaments - will one day deprive England of the advantages which she now enjoys because of her insular position. Then her naval and maritime power will be drastically reduced, especially if she should have to face a coalition of hostile powers. These are two very good reasons why England should now be prepared to make a commercial alliance with states in the second and third phases of industrialisation. (List, 1837a, pp. 48-51)

## CHAPTER EIGHT

### The Opposition of Countries to the Dominant Nation in Industry, Commerce and Sea Power

AT ALL Times the weaker countries in Europe have collaborated to defend themselves against the pretensions of a dominant state. This has been called the balance of power. In the same way there has been united opposition to England's dominant position with regard to industry and trade. England has become so powerful economically that she is able to bring good fortune or ill-fortune to other nations, so long as those countries act in isolation.

It is obvious that the idea of the Continental System was born because of England's excessive economic power and because of the possibility that England might misuse this power. Sooner or later the countries which have reached the second and third stage of industrialisation will have to unite to establish a new Continental System if ever England should show any inclination to use her superior sea power to injure the manufactures or commerce of these countries.

An attempt to set up a new Continental System, however, would endanger the prosperity not only of England but of all nations and -as we have shown in the last chapter - the only satisfactory solution to the problem would be the establishment of world free trade.

Since we can hardly expect England of her own free will to make the concessions necessary to secure the establishment of a world customs union, it seems to us that the countries which have reached the second and third stage of industrialisation should form an association of their own to press for the establishment of world free trade which should be the common aim of all countries.

France and the United States should take the lead in promoting such an alliance. These two countries are closely linked by commercial ties and by their common interest in energetically furthering the maintenance of the freedom of the seas. France and the United States have similar political institutions and similar economic interests. They are natural allies and they should be pre-

pared to take the initiative in promoting a plan which would ultimately benefit all the countries in the world.” (List, 1837a, pp. 51-52)

#### **6.04 The English strategy of confusion and domination**

“In England, where the free trade doctrine was born and received the greatest support, a recent attempt to put the theory into practice failed. After the advantages and drawbacks had been carefully weighed, it was decided to leave things as they were. It was evident that the claims of the supporters of free trade were unfounded.

What did the great champions of free trade - men like Canning and Huskisson - ever do to put into practice the doctrine which they so fervently supported? They caused a few laws to be passed which proved to be useless and are already a dead letter. They reduced a few import duties but always took care that the new duties were high enough to safeguard the home market for English manufacturers. They lowered unnecessarily high tariff walls but always made sure that import duties remained high enough to protect the country from a flood of imports. When they abolished some prohibitions they replaced them with import duties high enough to be equivalent to a prohibition. They even dealt with the Corn Laws in this way although the abolition of the import duties on cereals would have been of great benefit to their country. Did they ever do anything to reduce import duties on the products which France, Germany, or Switzerland would like to sell in the English market? No, they did not.

These men actually proclaimed that they had taken a great step forward towards free trade. But their hypocrisy was obvious since their true purpose was simply to trick those countries into making tariff concessions on the English goods which they imported. Even (the United States), the world’s youngest state, which has applied the most modern principles and inventions of our age to achieve unparalleled economic growth, has not been able to adopt the policy of free trade.

Sensible impartial observers have to admit that although England preaches free trade, she practises something very different. What England means by free trade is the right to sell freely all over the world both her own manufactured goods and the produce of her colonies while at the same time she erects hostile tariff barriers to prevent foreign goods from competing with her own products in the home market. It must in fairness be admitted that the way in which England treats the rest of the world is no different from the way in which other nations treat their weaker neighbours who are in no position to retaliate.



There is therefore a real danger that the strongest nations will use the motto "Free Trade" as an excuse to adopt a policy which will certainly enable them to dominate the trade and industry of weaker countries and reduce them to a condition of slavery.<sup>549</sup>

All over the world people misuse the term "Free Trade". They use it to deceive people while lining their own pockets under the cloak of patriotism. The vast mass of humanity cannot be expected to grasp the full implications of high politics or the differences between commercial, political, and social freedom.

Inside a country the policy of free trade is beneficial provided that it simply means that citizens are free to manufacture what they please and are not restricted when moving their produce from one place to another. But free trade in foreign commerce is far from beneficial. Indeed it is the equivalent of commercial slavery. Free trade in this sense - if introduced unilaterally - permits foreign competitors to ruin native industry while denying to native manufacturers the right to compete on equal terms with foreign rivals in markets abroad. Such "freedom" leaves us to the tender mercies of foreigners. Our industry and commerce are dependent upon their laws and regulations. (List, 1837a, pp. 24-25)

## **6.25 From protection to free trade**

### CHAPTER TWENTY FIVE

#### Transition from the Policy of Protection to the Policy of as much Free Trade as possible

WE REGARD ourselves as citizens of the world, but our faith in humanity rests upon the solid basis of nationalism. We can certainly envisage a situation in which a country would find freedom of trade preferable to a restrictive fiscal policy. We are citizens of a nation before we are citizens of the world. We devote our faculties to the energetic pursuit of the culture, welfare, fame, and security of the nation to which we belong. We strive towards the same goal for humanity. But the fortunes of humanity must be compatible with the fortunes of our country. We cannot support any policy that would harm our country in order to benefit the whole world. This is because we owe to our country our culture, our language,

---

<sup>549</sup> 1. Montesquieu in his *Esprit des Lois* writes: "Free trade is not a licence granted to merchants to do as they please. It is a servitude imposed upon them. If the state imposes restrictions upon the individual merchant, it does so in the interest of commerce in general. Trade is never subjected to greater restrictions than in free nations, and it is never subjected to fewer restrictions than in nations under despotic governments." And again: "England restricts the individual merchant but promotes commerce in general." [List's note]

our livelihood, and our intellectual values. Nature has implanted in our hearts the desire that future generations should enjoy the same benefits from the nation as we enjoy today.

A time comes when certain countries and regions are capable of adopting a policy of free trade instead of a policy of protection. We propose, however, that such countries should retain those import duties which are necessary to compensate manufacturers for the burden of taxation that they are expected to bear. The countries we have in mind are:

1. All purely agrarian countries which - for reasons given in chapter 10 - are not yet capable of developing industries even with the aid of a tariff. By trading freely with industrialised states these agrarian countries can more quickly develop their economies.
2. All colonies, all primitive regions, and all backward barbarous regions.
3. The leading industrial state in the world, because the high quality and the low prices of its manufactured products enables it to dominate the home market and to compete successfully in foreign markets.
4. Those industrialised states of the second rank which consider that they are strong enough to compete with the leading manufacturing country.
5. All countries in the world as far as commerce in raw materials and foodstuffs is concerned.

In this transition period, as in previous transition periods, a government should work out and announce in plenty of time a definite sliding scale for the reduction of import duties. It should also be prepared if necessary to impose import duties again if foreign competition should at any time threaten the nation's industrial forces.

In this connection the following observations may be made:

Import duties levied purely for revenue purposes should never be levied at so high a rate as to lead to a perceptible decline in consumption.

Export subsidies are a miserable palliative which cannot remedy the injurious effects of pernicious import duties on raw materials. Export subsidies direct to foreign countries capital and industry which might be much more usefully employed at home. Since they encourage fraud they are, from a financial point of view, harmful to the state. Finally export subsidies are not only useless and unnecessary but they force other countries to retaliate and to introduce such subsidies themselves.

Restrictions on the export of raw materials, foodstuffs, or manufactured goods cannot be justified by logical arguments or on economic grounds. Only in time of war can such restrictions be justified....

## CHAPTER TWENTY SIX

How best to introduce and to foster Free Trade”

## Appendix 4

### Underconsumption and credit

#### Contents

Underconsumption	532
Credit creation adjusted to productive capacity	536
Credit channeling to increase capacity	539
Monetary 'cranks' re-introduce finance	540
Banking and capital control	541

#### Underconsumption

Schumpeter despises certain theories more than any in the field of business cycles; those of underconsumption and of oversaving. He repeatedly says that they are myths and can hardly be considered scientific. It is striking, however that he produces no arguments against these theories, but actually several in favour of them - and he notes that Marx (his favourite in this area) held such ideas as well (Cf. Schumpeter, 1954, pp. 740-750; and pp. 1129-1135)

Already the Mercantilists held theories on insufficient demand. They held that employment and prosperity were aided by spending, in particular on luxurious goods, and furthermore that saving was damaging because it decreased employment and output. Friedrich II of Prussia accordingly argued in his *Anti-Machiavel* that money must circulate,

Any private individual and any king who does nothing but pile up and bury money, understands nothing of the art of enrichment: it is necessary to make the money circulate to be really rich. (Friedrich II, 1740, ch. xvi)

Ironically the Physiocrats who Smith held so high, are also seen as the first inventors of the idea of over-accumulation and underconsumption (Cf. Meek, 1951 who quotes James Mill). Also Jean Charles Léonard de Sismondi and Thomas Malthus paid more attention to the problem of consumption than to other economists at the time. Sismondi says concerning an entrepreneur,

If it be then asked why he stops, he will answer, like the workman, that money is wanting, that money does not circulate. (Sismondi, 1815, Ch.2, see also Sismondi, 1824)

Malthus dealt with the issue, in 1836, five years before List (Cf. Malthus, 1836, *Introduction*).<sup>550</sup> Joseph Schumpeter credits Malthus and Sismondi with being the originators of the underconsumption theory of the oversaving type (Cf. Schumpeter, 1954, p. 740), while Marx claims that all Malthus did in his *Principles* was to copy Sismondi.

Malthus and Sismondi represent, however, two distinct versions as Sismondi regards low wages as a cause of instability whereas Malthus was of the opinion that the landed aristocracy could better fill the function of efficient demand through its consumption of luxuries. This was in line with his ideas of the *iron law of wages* that Ricardo developed further, emphasising the danger of population growth.

J.B. Clark and J. K. Rodbertus were later to follow up the track that Sismondi pointed out, although being less hostile to the danger of labour-saving machinery than Sismondi (Cf. Clarke, 1924). He was probably the first to discuss the problem of an underconsumption created glut on the basis of income distribution between the two factors of production in the industrial process, capital and labour. Also, in German, French, "British periphery", and early American (German oriented at the turn of the 20<sup>th</sup> Century) economic thought, there was a continuous discussion of related financial phenomena.

As against the classics, H. Carey points to the potential disturbing causes to consumption when claiming about cotton production that,

---

<sup>550</sup> Malthus, writes in this *Principles of Political Economy*:

Adam Smith has stated, that capitals are increased by parsimony, that every frugal man is a public benefactor, and that the increase of wealth depends upon the balance of produce above consumption. That these propositions are true to a great extent is perfectly unquestionable. No considerable and continued increase of wealth could possibly take place without that degree of frugality which occasions, annually, the conversion of some revenue into capital, and creates a balance of produce above consumption; but it is quite obvious that they are not true to an indefinite extent, and that the principle of saving, pushed to excess, would destroy the motive to production. If every person were satisfied with the simplest food, the poorest clothing, and the meanest houses, it is certain that no other sort of food, clothing and lodging would be in existence; and as there would be no adequate motive to the proprietors of land to cultivate well, not only the wealth derived from conveniences and luxuries would be quite at an end, but if the same divisions of land continued, the production of food would be prematurely checked, and population would come to a stand long before the soil had been well cultivated. If consumption exceed production, the capital of the country must be diminished, and its wealth must gradually be destroyed from its want of power to produce; if production be in a great excess above consumption, the motive to accumulate and produce must cease from the want of an effectual demand in those who have the principle means of purchasing. The two extremes are obvious; and it follows that there must be some intermediate point, though the resources of political economy may not be able to ascertain it, where, taking into consideration both the power to produce and the will to consume, the encouragement to the increase of wealth is the greatest." (Malthus, 1836, *Introduction*)

Overproduction cannot exist, but underconsumption may and does exist. The more that is produced, the more there is to be consumed; and as every man is a consumer in the exact ratio of his production, the more he can produce the better it will be for him and his neighbour, unless there is some disturbing cause, preventing the various persons desiring to consume from producing what is needed to enable them to effect their exchanges with the planter, to the extent that is necessary to their comfort. (Carey, 1851, p.103).

In opposition to the ignorance of the classical school, not only of the financial sector, but also of its independence, we have Rudolf Hilferding's *Finance Capital*. It is a classic discussion of how capital came to liberate itself from production, after having been tied to it since merchant capitalism and simple accumulation ("buy cheap sell dear") dominated the markets. Chapter 4 has the telling title *The periodic tendency of capital to liberate itself and lie fallow* (Cf. Hilferding, 1910 pp.151-167) where he discusses the reason why capital is pulled out of productive circulation, a process which he calls "the liberation of money capital".

Roscher argued that consumption lagging behind leads to commercial crisis,

The growth of a nation's economy depends on this: that production should always be, so to speak, one step in advance of production, ... Now, the politico-economic disease which is produced by the lagging behind of consumption, and by the supply being much in advance of the demand, is called a commercial (market) crisis. (Roscher, 1877, § CCXV)

Roscher first mentions Say and the Mills as classical economists who deny the possibility of a general glut, and he argues that changed distribution of national income can lead to a general glut,

Most theorists deny the possibility of a general glut, ... J.B.Say ... Every producer who wants to sell anything brings a demand into the market exactly corresponding to his supply. (J. Mill.) Every seller is ex vi termini also a buyer; if, therefore production is doubled, purchasing power is also doubled. (J. S. Mill.) Supply and demand are in the last analysis, really, only two different sides of one and the same transaction. ... (Roscher, 1877, § CCXVI)

All these allegations are undoubtedly true, in so far as the whole world is considered one great economic system, and the aggregate of all goods, including the medium of circulation, is borne in mind. The consolation which might otherwise lie herein is made indeed to some extent unrealizable by these conditions. It must not be forgotten in practice that men are actuated by other motives than that of consuming as much as possible. ... There are, everywhere, certain consumption-customs corresponding with the distribution of the national income. Every great and sudden change in the latter is therefore wont to produce a great glut of the market. (Roscher, 1877, § CCXVII)

The latter point of general improvement in the industrial arts is reminiscent of today's so-called paradigm shift in the IT sector.

In his famous chapter 23 of *The General Theory*, John Maynard Keynes quotes A.F Mummery and J. A Hobson's book from 1889, *Physiology of Industry*, who came to the same conclusion as List that saving may be dangerous for a nation,

We are thus brought to the conclusion that the basis on which all economic teaching since Adam Smith has stood, viz., that the quantity annually produced is determined by the aggregates of Natural Agents, Capital and Labour available, is erroneous, and that, on the contrary, the quantity produced, while it can never exceed the limits imposed by these aggregates, may be, and actually is, reduced far below this maximum by the check that undue saving and the consequent accumulation of over-supply exerts on production; i.e., that in the normal state of modern industrial communities, consumption limits production and not production consumption. (Mummery and Hobson, 1889, p. vi.)

Mummery and Hobbes says,

We also note that the charge of commercial imbecility, so freely launched by orthodox economists against our American cousins and other Protectionist Communities, can no longer be maintained by any of the Free Trade arguments hitherto adduced, since all these are based on the assumption that over-supply is impossible. (Mummery and Hobson, 1889, p. ix.)

The Norwegian heretic Bertram Dybvad Brochmann held very parallel ideas although writing in a more religiously moulded fashion attacking the modern worship of Mammon. His ideas changed somewhat over the years, and in 1956 he wrote an essay called *Real Economy Contra Fictive Economy. Saving in the Time of Abundance. Why Norway goes bust.* (Cf. Brochmann, 1956) For instance he writes that "consumptive investment" should be promoted instead of monetary saving to promote technical development,

General saving leads today to mutual sabotage. ... Conclusion: ... Personal saving of money in the form so far practised, should in the future *not be stimulated*, since this, as shown above, restrains the circulation of money and leads to less turnover and lower activity in general. ... People should in contrast be induced to buy useful and durable things. This form of saving should be stimulated instead of the old method of general saving of money. This is not alone a necessary rearrangement, but an absolutely necessary rearrangement *if we are to be able to receive the technical goods of today and tomorrow*, and is this not what Men want? Development hardly lets itself be set back. (Brochmann, 1956)

Ragnar Frisch<sup>551</sup> in 1947 repeats this view of Brochmann and of many monetary heretics, but is not as radical and thorough,

---

<sup>551</sup> Ragnar Frisch was the first editor of *Econometrica*, elected the first president of the *Econometric Society* and the first "Nobel" Laureate in economics.

Saving for one singular individual and for society as a whole are two completely different things. They should really not be denominated with the same term, it looks confusing. ... It is only by a productive arrangement that society as a whole can implement saving. (Frisch, 1947, p.41, my translation)<sup>552</sup>

What Ragnar Frisch writes below, in 1934, could in the main also have been written today, the monetary system has failed in its mission to make buyers and sellers find each other, and provokes a vicious self-enforcing circle of austerity,

It should have been the function of the monetary system to make the buyers and sellers able to find each other. ... But the monetary system has failed in its historic mission. ... we have a monetary system which does not foster the exchange activities among transactors during depressions, but on the contrary, gives effects which force the individuals to curtail their activities even further. ... groups are forced mutually to undermine each other's position. Each is forced to curtail its demand for the goods produced and services rendered by the other groups which, in turn, will cause still further contraction of demand for its own products, and so on. This meaningless vicious circle is what I understand by the incapsulating phenomenon. (Frisch, 1934; quoted in Andvig 1980)

### **Credit creation adjusted to productive capacity**

An immediate expansion of the money supply would, however, most easily take the shape of fiat money. List does not discuss fiat money, which was promoted by G. Fichte and Adam Müller.

Mercantilist ideas of coinage shortage was an originator of the idea that 'money matters' and expansion of the money supply triggers an expansion of production (Cf. Heckscher, 1931). An early exponent of "money matters" is Gerard de Malynes (1586-1623) who claimed that an expanding money supply would not only increase the price level, but also decrease the interest rate and stimulate the economy (Cf. Malynes, 1601 & 1622).

Opposed to the Ricardian/Mill tradition, the monetary 'cranks' also believed that "money matters" or to put it differently that money is an exogenous factor in the economic system and thereby capable of creating an effect; influencing the workings of the system.

---

<sup>552</sup> The text in the Norwegian original, reads as follows: "Sparing for et enkelt individ og for samfunnet som helhet er to helt forskjellige ting. De burde egentlig ikke betegnes med samme navn, det virker bare forvirrende... Det er bare ved en produktiv foranstaltning at samfunnet som helhet kan få i stand en sparing." (Frisch, 1947, p.41)



After WW I, there were many heretics, for instance Foster, Catchings, Douglas, who saw underconsumption (over-saving) as the cause of depression and monetary expansion as a remedy. Douglas came up with several suggestions, one was a general basic minimum citizen salary. Paul Krugman's suggestion to helicopter money over Tokyo goes even further.

The monetary heretics from Arthur Kitson in the 1890s, claimed that money suffered from serving several (potentially mutually exclusive) purposes at the same time. The attainment of these purposes often mutually excluded each other. Money serves the purposes of exchange, wealth measurement and wealth storage. The last purpose may undermine the first. This is why several monetary heretics, such as Silvio Gesell and Rudolf Steiner, promoted the idea that the value of money should decrease with time in order to provoke spending over saving.

Silvio Gesell (Cf. Gesell, 1904) Rudolf Steiner (Cf. Steiner, 1921) and Bertram Dybvad Brochmann (Cf. Brochmann, 1922, 1923, 1956) believed that money in circulation would have to be reduced in value over time – an institutionalised kind of inflation - through instruments like stamped money. This would spur spending and circulation.

The monetary cranks in the 1920s and 1930s also generally held that stimulating demand through increasing the money supply could cure slumps and unemployment. They came up with various suggestions of how to go about this, some curious and some quite ingenious. Keynes was an astute student of these ideas and devoted chapter 23 of his *The General Theory* to these 'crank' theories (Cf. Keynes, 1936, ch.23).

One would in the tradition of Adam Smith, claim that investments have to be financed by saving in advance, or using another expression, financed by the Labour Fund i.e. surplus that has not been consumed. David Hume, claimed that issuing new money mainly would lead to inflation,

... augmentation [in the quantity of money] has no other effect than to heighten the price of labour and commodities ... In the progress toward these changes, the augmentation may have some influence, by exiting industry, but after prices are settled ... it has no manner of influence. (Hume, 1742, Part II, Essay IV, OF INTEREST, § 3)

The Nobel laureate Frederick Soddy agrees that saving has to precede investment. This is a surprise since Frederick Soddy, dedicated his *Wealth...* to the modern father of British monetary heretics, Arthur Kitson. Soddy often holds view similar to orthodoxy. This is clearly true in this case as well. Soddy writes,

If the issue of money precedes abstinence ... This raises prices and tends after a short while to reduce employment and production even below the original level, ... (Soddy, 1933, p.299)

This is only correct if the orthodox precondition of full capacity utilisation is fulfilled.

If it not, there is room for money expansion without inflation, especially if new money is channelled into branches with most excess capacity. Credit can be created and expanded until this capacity has been used fully without danger of inflation. This was a main point of Arthur Kitson, who forcefully attacked the abstinence theory that Soddy holds so dear. (Cf. Kitson, 1894)

The practical problem concerning issuing credit is to measure the exact prevalent productive capacity and issue credit correspondingly. This can never be anything but a process of intelligent guesswork based on statistical analysis. Post WW II efforts to measure GDP e.g. by Frisch was an attempt at handling this point.

There is also the possibility of improving capacity to produce with targeted injections of credit: If productivity is raised this will cause prices to fall, i.e. deflation as opposed to the claimed inflation. Hutchinson writes,

Arthur Kitson concluded that 'credit should be based on the productive capacity of the whole of society' (Kitson, 1894). To this end, the medium of exchange should be free from government control or the control of powerful individuals.

Kitson developed the second theme of underconsumptionism by attacking the theory that trade and industry must necessarily be financed from savings, i.e. from abstinence and the surplus of the idle rich. Consumption, and not abstinence, was the means to stimulate production and create wealth. (Hutchinson, 1997, p.27)

This last argument is valid only in a closed system, such as the global economy or in an autarkic state. Whenever trade occurs with outside and between systems, the troublesome issues of trade and payments deficits arise.

Major Douglas and later Keynes, also claim that new credit for investments (productive consumption) does not have to come from saved income alone, but must rather be issued on the basis of the societal free and unused capacity to produce. This is not a matter of saving (abstinence from unproductive consumption) preceding productive consumption (investment) and therefore producing before financing. It is a matter of financing before producing and thereby issuing credit before the productive ability is installed (Cf. Bjørseth, 1934, p. 150; Keynes, 1930, II, p. 220). It illustrates how modern fiat money is just that; fiat, and fiat in the future.

Productive investments can be financed with claims in future production. It is especially so if investments are highly productive and lead to a fast capacity expansion. Therefore, the orthodox argument of 'first save and then invest' is turned upside down; 'first invest'.

## **Credit channeling to increase capacity**

List argued that some sectors should have preferential treatment due to their importance for other sectors, such as education, communication (Cf. List, 1841, p. 297) and machine manufacture (Cf. List, 1841, p. 314 and p. 151). He argued that the State should involve itself in financing such schemes.

Channelling credit into expansion of capacity to produce means that both this capacity and accordingly also credit over time can be expanded, in principle over time without any limits – apart from for instance resources limits, such as space. The sectors that readily mark themselves as targets for capacity expansion are sectors which other sectors especially depend upon, such as transport and machine manufacture.

Keynes clearly acknowledged the importance of improving capacity to produce that List called the productive power and claimed as the true wealth of a country as opposed to its monetary riches. It is a common mistake to believe that Keynes only was interested in short run problems as if he thought financial policy could not affect long term growth. However, although Keynes argues that authorities must keep up demand in the short run ("In the long run we are all dead."), he also argues explicitly that authorities must use financial policy to create investments being the most important source of growth in the long term.

Keynes argued that "productive consumption" must be furthered, especially through "large scale" public investments financed by "cheap and abundant credit". Keynes says furthermore that,

Loan expenditure must spread its beneficent influence around the world. (Keynes, 1933, ch. 3, pp. 20-22; see also Keynes, 1926, ch. IV; and Keynes, 1930, Vol. II, Ch. 28, 29, 37).

Schumpeter has similar ideas about the basic role of capital, being the catalyst of socio-economic transformation into a more efficient structure,

*Capital is nothing but the lever by which the entrepreneur subjects to his control the concrete goods which he needs, nothing but a means of diverting the factors of production to new uses, or of dictating a new direction to production. This is the only function of capital, and by it the place of capital in the economic organism is completely characterized. (Schumpeter's own italics. Schumpeter, 1934 (1961), p.116, in chapter III: 'Credit and Capital. The Nature and Functions of Credit.'*)

Ragnar Frisch developed what he termed *The Oslo Channel Model* where he argued that aggregate treatment of investment evades the real problem of differentiating between possible investment projects, in essence arguing for a qualitative credit theory. Frisch writes,

In a decision model it is absolutely inadequate to consider 'investment' as some sort of aggregated figure (perhaps to be compared with some other aggregated figure such as 'saving'). To work with such aggregated concepts would be evading the real problem of economic policy discussions. One of the most crucial aspects in a truly decisional analysis of the national economy is precisely to find out what sorts of investments to make. Practical planners are every day feeling the embarrassing problem of picking amongst a great number of investment projects. A comparison between different categories of investment must, therefore, stand in the center of the analysis.

...

There are four types of data to be included as direct repercussions in a project description.

...

Third, a set of coefficients describing the effects which the project will have on the capacities of production when the fruits of the projects – if and when it is started – begin to emerge. It is essential to take account of the time shape of this capacity effect. (Frisch, 1962, pp. 108-109)

### **Monetary 'cranks' re-introduce finance**

The monetary 'cranks' may generally be classified as underconsumption theorists. They re-introduced the financial sector into British economic analysis: Kitson, Douglas, Soddy, Keynes, besides German and American monetary cranks like George, Gesell, Knapp, Hayek, Mises, Friedman etc.

The Scandinavians had the Norwegian Brochmann and the Danish Kristensen, apart from the academic economists who focused on monetary issues like the Swedes Wicksell and Casell. Douglas, Soddy, Brochmann and Kristensen are not even mentioned in Schumpeter's *History...*, 1954 - in spite of them indirectly playing an important role, although hidden from most academics' attention. (Cf. Schumpeter, 1954)

The ideas of some of the cranks, rather than others, later became main stream and the link between the initiators and the successful is not hidden. Keynes, for instance, openly acknowledges his debt to Gesell (Cf. Keynes, 1936, p.353-358) - though Gesell was more of an anarchistic thinker (In the sense of Free Banking - FB) than Keynes was, with his more statist / mercantilist oriented ideas (in the sense of National Banking - NB). In this way Keynes would be closer to Douglas and to Soddy.

The Norwegian Bertram Dybvad Brochmann also had hidden influence through the first Nobel laureate in economics (1969), Ragnar Frisch. Frisch borrowed, without ever stating so in public, Brochmann's ideas on national accounting, but Frisch left out Brochmann's inclusion of the household sphere, natural resources and energy. Frisch also wrote about the monetary questions and was like Keynes very open to the ideas of the heretics (Cf. Frisch, 1933; Frisch, 1934; and Andvig,

1980). As is generally acknowledged Frisch developed ideas similar and in parallel to Keynes.

Also Frisch emphasised that "consumer demand was the driving force of the system" and that "attempts to save could curtail consumption without giving rise to any investment". Frisch says, "One should in other words, attempt to create an indirectly planned economy." (quoted in Andvig, 1980, pp.11-12)

## **Banking and capital control**

Modern adherents of the monetary cranks do exist. Friedman's idea of air-bombing an economy with money (Cf. Friedman, 1969) is repeated by Paul Krugman's ideas for a solution to the Japanese banking crisis.

Hayek's idea on Free Banking (Cf. Hayek, 1976 and elaborated in Hayek, 1978), which he picked up from the Scottish reputed Treasurer in France, John Law, argued (with approval from Adam Smith) that private banks would be more responsive to the trading needs of the markets than would a central bank monopoly. Although theoretically more efficient, it may also be claimed that private banking would increase instability.

For alternative decentralised solutions, Hayek could have consulted the British monetary cranks, of which Arthur Kitson was the pioneer (Cf. Kitson, 1894) - and Frederick Soddy's intellectual mentor. They attacked the money issuing monopoly of the Bank of England that paid more attention to the value of money as against gold than to the situation in industry.

In the late 1930s (with Roosevelt's New Deal etc.), WW II and the post war period the NB cranks (Keynes etc.) gained the upper hand for some time. The practice, however, most often was that of neutral central banking (CB) as opposed to more true NB with deliberate discrimination between various economic activities regarding the premises for credit. The trend in the WW II - and post WW II period was to move from NB via CB to FB. Therefore, starting in the late 1960s and gaining force around 1970, the FB cranks (Hayek, Friedman) have been increasingly influential, as regulation has been and is being scaled back - both on the national and the international scenes. The NB period seems to have been somewhat successful in curtailing over-accumulation and in promoting growth of production and consumption.

However the problem seems to have returned with increased force in the new FB period. With FB over-accumulation in the financial sector has been increasing. The NB solution was to channel surplus into production and reproduction by controlling the capital flows. In the short run the solution was to channel the flow into demand - and in the long run into fixed capital investments. FB may be seen as an outgrowth of the classical school that did not pay attention to monetary problems. Although the FB school does pay attention, in practice it only legitimis-

es the old practice of non-intervention that was a result of the ignorance of the former classical school.

The quarrel between the NB and FB schools was the usual dispute over “who picks the winners” question, and this time regarding the control of capital flows. The role of public goods was an additional question focusing on the role of large-scale investments that would need the intervention of a macro-actor (as opposed to "micro" entrepreneurs and consumers) to ensure the interests of the general public.

On the other hand, as noticed above, FB also represented a criticism of the deflationary austerity policy of the gold oriented central banks at the time it emerged in late 19<sup>th</sup> Century and the post WW I period. Besides, in the eyes of the critics, the NB solution paid overly attention to large-scale projects neglecting small local entrepreneurs and thereby contributed to market concentration and anti-social monopoly rents.

One lesson may be that the role and effect one institution and remedy had at one time may be different today. However, also today we may observe central banks inclined to pursue austerity policies and increasing concentration on any market.

# Bibliography

## Contents

Primary literature	<b>543</b>
Journals	547
Translations	550
Secondary literature on List	<b>551</b>
Related literature	<b>553</b>

### Primary literature

- (1811) *Zeugnis*, (meaning 'certificate') by Oberregierungsrat Oberamtmann Georg Friedrich von Fischer (Friedrich List's superior), Ulm: 5 February 1811, in *Friedrich-List-Archiv*, Reutlingen Stadtarchiv Online, Signatur: 55/03, <[http://www.stadt-reutlingen.de/Listarchiv/detail\\_la.asp?pm=17](http://www.stadt-reutlingen.de/Listarchiv/detail_la.asp?pm=17)> , accessed 2010-02-14
- List, Friedrich. (1815a). Vorschläge, Deutschlands künftigen Handel betreffend, *Allgemeiner Anzeiger der Deutschen*, 1815, Nr. 209 u. 211) (Anonymus)
- List, Friedrich. (1815b). *Entwurf einer Vorschrift für das Gemeinderechnungswesen* Stuttgart, <[http://www.stadt-reutlingen.de/Listarchiv/detail\\_la.asp?pm=23](http://www.stadt-reutlingen.de/Listarchiv/detail_la.asp?pm=23)>, ccessed 2009-02-03
- List, Friedrich. (1816). *Ein ächtes Mittel zur Vertilgung des Schreiber-Unfugs in Württemberg*, Frankfurt a. M.
- List, Friedrich. (1817a). *Ausführlicher Bericht über die Vernehmung der Auswanderer zu Heilbronn, Weinsberg und Neckarsulm*, <[http://www.stadt-reutlingen.de/Listarchiv/detail\\_la.asp?pm=61](http://www.stadt-reutlingen.de/Listarchiv/detail_la.asp?pm=61)>, accessed 2009-02-03
- List, Friedrich. (1817b). *Gutachten zur Errichtung einer staatswirtschaftlichen Fakultät*, in *Friedrich List's Gesammelte Schriften*." ed. Ludwig Haeuffer, Stuttgart and Tübingen: J. G. Cotta'scher Verlag, 1850, vol. 2, pp. 1-14
- List, Friedrich. (1818-1820). Aufsätze in Sachen des Handelsvereings, in *Friedrich List's Gesammelte Schriften*." ed. Ludwig Haeuffer, Stuttgart and Tübingen: J. G. Cotta'scher Verlag, 1850, vol. 2, pp. 15-62
- List, Friedrich. (1818a). *Die Staatskunde und Staatspraxis Württembergs im Grundriß: zur näheren Bezeichnung seines Lehrfaches und als Leitfaden für seine Zuhörer*, Tübingen
- List, Friedrich. (1818b). List's letter with an offer of marriage to Karoline Neidhard in Stuttgart (his later wife), < [543](http://www.stadt-</a></p></div><div data-bbox=)

- reutlingen.de/Listarchiv/detail\_la.asp?pm=74>, accessed 2009-02-03
- List, Friedrich. (1819). Bittschrift an die Bundesversammlung, *Werke*, 1927, Vol.1 (2), pp.491-496, English translation in Margaret Hirst, *Life of Friedrich List*, 1909, pp.137-145
- List, Friedrich. (1820a). *Denkschrift, die Handels- und Gewerbsverhältnisse Deutschland betreffend*, Feb.15, 1820, submitted to Metternich on February 18 and to the emperor of Austria on March 1, 1820, in *Werke*, 1927, Vol.1 (2), pp.527-547, also called the *Vienna Memorandum*.
- List, Friedrich. (1821a). *Reutlingen Petition*, in *Werke*, 1927, Vol.1 (2), pp.684-688
- List, Friedrich. (1821b). *Vertheidigungs-Rede des Abgeordneten List gegen den Vortrag des Herrn Justiz-Ministers vom 12ten Februar: gehalten den 17ten Februar in der Kammer der Abgeordneten*. Stuttgart: Zuckschwerdt (List's defence speech in Parliament)
- List, Friedrich. (1826). *Grundriss des Römischen Rechts. Ein pädagogischer Versuch*, Giessen (contains: Übersicht über das Eherecht nach dem Codex juris canonici)
- List, Friedrich. (1827a). *Proposals, for publishing a work, to be entitled The American economist*, in two volumes, by Frederick List, of Pennsylvania, formerly professor of political economy, and counsel of the General Society of German Manufacturers and Merchants, for obtaining a German system of political economy. Reading, Pa.
- List, Friedrich. (1827b). *Outlines of American Political Economy* in a Series of Letters Adressed by Friedrich List Esq., Late Professor of Political Economy at the University of Tübingen in Germany, To Charles J.Ingersoll, Esq., To which is added the celebrated letters of Mr.Jefferson to Benjamin Austin, and of Mr.Madison to the editors of the Lynchburg Virginian, Philadelphia, Penn.: Samuel Parker, Reprinted in List, Friedrich. (1927) "Werke", Vol. II, pp. 97-156. Reprinted with a translation in German: *Grundriss der amerikanischen politischen Ökonomie*, Reprinted in Margaret Hirst, *Life of Friedrich List*, 1909, pp.146-273. Also published with a parallel translation in German, Wiesbaden: Dr. Böttiger Verlag. Edited by Michael Liebig, 1996. References are to the 1996 edition
- List, Friedrich. (1827c). Letters with Joseph von Baader: Kanäle und Eisenbahnen in den nordamerikanischen Freistaaten (Canals and Railroads in the Free States of America), published in *Ausburger Allgemeine Zeitung*
- List, Friedrich. (1827d). *Philadelphia Speech*, At a dinner given to him by the Pennsylvania Society for the Encouragement of Manufactures at the Mansion House, Philadelphia, November 3, 1827. Reprinted in Hirst, Margaret. (1909). *Life of Friedrich List*, pp. 272-286.
- List, Friedrich. (1828a and 1829b). *Mittheilungen aus Nord-Amerika*, Hamburg: Hoffmann und Campe (Reports from North America)



- List, Friedrich. (1828b). Letters with Governor Giles of Virginia, listed in List, 1841a, <<http://kreuzgang.org/pdf/friedrich-list.das-nationale-system-der-politischen-oekonomie.pdf>> , p.223, accessed 2002-06-15
- List, Friedrich. (1828c). Harrisburg Address, 2. Feb. 1828, in *Werke*, Vol. 2, pp. 186-206
- List, Friedrich. (1829a). *Reports on the improvement of the Little Schuylkill*, Reading, Pa. Formerly part of the James Madison Papers, vol. 78, p. 27., Manuscript Division, Library of Congress.
- List, Friedrich. (1829b). *Mittheilungen aus Nord-Amerika*, Hamburg: Hoffmann und Campe ("Herausgegeben von Ernst Weber und E.W. Arnoldi." Printed by: Langhoffsche buchdruckerei, Hamburg)
- List, Friedrich. (1830a). Remarks on Mr. Cambreleg's Report on the Tariff, listed in List, 1841a, <<http://kreuzgang.org/pdf/friedrich-list.das-nationale-system-der-politischen-oekonomie.pdf>> , p.223, accessed 2002-06-15
- List, Friedrich. (1830b). On a Commercial Treaty between France and the United States, listed in List, 1841a, <<http://kreuzgang.org/pdf/friedrich-list.das-nationale-system-der-politischen-oekonomie.pdf>> , p.223, accessed 2002-06-15
- List, Friedrich. (1831) *Idees sur les réformes économiques, commerciales et financières, applicables à la France*, in the *Revue Encyclopédique*, March and November 1831, reprinted in F. List, *Werke*, Vol. V, pp. 59. 91, 1927-36
- List, Friedrich. (1833). *Über ein sächsisches Eisenbahn-System als Grundlage eines allgemeinen deutschen Eisenbahn-Systems* (Dokumente zur Eisenbahngeschichte, 2). 2nd reprint (1897 edition) Mainz 1984 (In English: *On a Saxon Railway Network*)
- List, Friedrich. (1835). *Memoire die Eisenbahn von Mannheim nach Basel betreffend*, without location of publisher
- List, Friedrich. (1837a). *Le System Naturel de l' Economie Politique. Et la patrie, et l'humanité. Réponse à question de l'Académie des Sciences Morales et Politiques*. German translation: *Das natürliche System der politischen Ökonomie* , *Werke* vol. IV, 1927; English translation: *The Natural System of Political Economy*, Edited by W.H.Henderson, Totowa, N. J.: Frank Cass. 1983
- List, Friedrich. (1837b). *Le Monde Marche. Réponse à la question de l'Académie des Sciences Morales et Politiques: Quelle peut être sur l'économie materielle, sur la vie civile des forces motrices et des moyens de transport qui se propagent actuellement dans le mondes?*, Unpublished (In English: *The World Moves. On the Effects of Steam Power and the New Means of Transportation*). A translation into German was made in 1985:
- List, Friedrich. (1837b). *Die Welt bewegt sich. Über die Auswirkungen der Dampfkraft und der neuen Transportmittel auf die Wirtschaft, das bürgerliche Leben, das soziale Gefüge und die Macht der Nationen* (Pariser Preisschrift 1837), Göttingen: Vandenhoeck & Rup-

- recht. Translated, commented and edited by Eugen Wendler, Göttingen: Vandenhoeck & Ruprecht, 1985
- List, Friedrich. (1938). *Das deutsche National-Transport-System in volks- und staatswirthschaftlicher Beziehung*, beleuchtet von Fr. List, Altona und Leipzig: Hammerich, reprint: Berlin: Transpress, 1988. (Meaning: "Political and Economic Aspects of the German National Transport System") Originally printed as an article in the *Staatslexikon*: „Eisenbahnen und Canäle, Dampfboote und Dampfwagen-transport“, then as a separate pamphlet under the title *Railroads and Canals, Steamboats and Steamwagontransport*.
- List, Friedrich. (1839a). *Das Wesen und der Werth einer nationalen Gewerbsproduktivkraft*, in *Friedrich List's Gesammelte Schriften*." ed. Ludwig Haeuffer, Stuttgart and Tübingen: J. G. Cotta'scher Verlag, 1850, vol. 2, p. 101 ('The Nature and Value of a Nation's Forces of Production')
- List, Friedrich. (1839b). *Die Freiheit und die Beschränkungen des auswärtigen Handels, aus dem historischen Gesichtspunkt beleuchtet* ('The Freedom and Restrictions on Foreign Trade, Illuminated from an Historical Viewpoint'), in *Friedrich List's Gesammelte Schriften*." ed. Ludwig Haeuffer, Stuttgart and Tübingen: J. G. Cotta'scher Verlag, 1850, vol. 2, pp. 63-100
- List, Friedrich. (1839c). *Über das Wesen und den Wert einer nationalen Gewerbsproduktivkraft*, reprint by August Skalweit (ed), Frankfurt a. M.: Klostermann, 1946 (On the Nature and Value of a National Commercial Productive Force)in "Friedrich List's Gesammelte Schriften." ed. Ludwig Haeuffer, Stuttgart and Tuebingen: J. G. Cotta'scher Verlag, 1850, vol. 2, pp. 101-149
- List, Friedrich. (1841a, 1885, 1904, 1966 and 1991). *Das Nationale System der politischen Oekonomie. Der Internationale Handel, die Handelspolitik und der deutsche Zollverein*, Vierte Auslage, Jena, Verlag von Gustav Fisher 1922. English translation: „*The National System of Political Economy, The International Trade, Trade Policy and the German Customs Union*“, published by Longman's Green & Co., London 1885 and 1904). Reprint: A. M. Kelly Publishers, Fairfield N.J., 1991. The Introduction was not translated, but can be found in Hirst, 1909. US translation by G. A. Matile, including the notes of the French translation by Henri Richelot, Philadelphia: J. B. Lippincott & Co, 1856
- List, Friedrich. (1841b, 1909). English translation of the Introduction to *Das Nationale System der politischen Oekonomie*, in Margaret Hirst, *Life of Friedrich List*, 1909, pp.287-319
- List, Friedrich. (1841c). *Das deutsche Eisenbahnsystem als Mittel zu Vervollkommnung der deutschen Industrie, des deutschen Zollvereins und des deutschen Nationalverbandes überhaupt*, Stuttgart and Tübingen: Cotta , reprinted in in *Schriften. Reden. Briefe*, vol. 3, pt. 1 ( 1929), p. 347 ('The German Railroad-system as a Means to Perfection of German Industry; the German Customs Union; and the German National Union in General')

- List, Friedrich. (1842). *Die Ackerverfassung, die Zwergwirtschaft und die Auswanderung*, (or translated: *The Agricultural Constitution, Small Business and Emigration*), in *Deutsche Vierteljahrsschrift*, 1842, Heft IV. Nr. XX, specially printed, Stuttgart und Tübingen 1842. -775, 776. also in *Werke*, 1927, vol.5, pp. 418-547
- List, Friedrich. (1844a). *Zur deutschen Eisenbahnfrage*, in *Friedrich List's Gesammelte Schriften*." ed. Ludwig Haeuffer, Stuttgart and Tübingen: J. G. Cotta'scher Verlag, 1850, vol. 2, pp. 235-254
- List, Friedrich. (1844b). *Über die Beziehungen der Landwirtschaft zur Industrie und zum Handel*, in *Friedrich List's Gesammelte Schriften*." ed. Ludwig Haeuffer, Stuttgart and Tübingen: J. G. Cotta'scher Verlag, 1850, vol. 2, pp.
- List, Friedrich. (1845). *Über die national-ökonomische Reform des Königreichs Ungarn*, in *Friedrich List's Gesammelte Schriften*." ed. Ludwig Haeuffer, Stuttgart and Tübingen: J. G. Cotta'scher Verlag, 1850, vol. 2
- List, Friedrich. (1846a). 'Factory Bill manuscript', in *Werke*, 1927, Vol. VII: Die politisch-ökonomische Nationaleinheit der Deutschen: Aufsätze aus dem Zollvereinsblatt und andere Schriften der Spätzeit
- List, Friedrich. (1846b). *Die politisch-nationalökonomische Nationaleinheit der Deutschen*, in *Friedrich List's Gesammelte Schriften*." ed. Ludwig Haeuffer, Stuttgart and Tübingen: J. G. Cotta'scher Verlag, 1850, vol. 2, pp. 367-434
- List, Friedrich. (1846c). *Über den Wert und die Bedingungen einer Allianz zwischen Grossbritannien und Deutschland*, *Werke*, Vol. VII, pp. 267-298. (In English: *On the Value and Conditions of an Alliance between Great Britain and Germany*). Presented to the governments of England and Prussia, in *Friedrich List's Gesammelte Schriften*." ed. Ludwig Haeuffer, Stuttgart and Tübingen: J. G. Cotta'scher Verlag, 1850, vol. 2, pp. 435-468
- List, Friedrich. (1850). *Friedrich List's Gesammelte Schriften*, edited by Ludwig Häusser, Stuttgart and Tuebingen: J. G. Cotta'scher Verlag
- List, Friedrich. (1918). *Staatsinteresse und Privatwirtschaft : eine Auswahl aus den Schriften (A Selection of Writings on National Interests and Private Business)*, edited by Hildegard Schwab-Felisch, Berlin: Deutsche Bibliothek
- List, Friedrich. (1929-36). "Werke": Erwin von Beckerath, and Karl Goesser, Friedrich Lenz, William Notz, Edgar Salin, Arthur Sommer. (eds). (1927-1936). *Friedrich List. Schriften, Reden, Briefe*. 10 volumes in 12 books, published by the List-Gesellschaft with support of the Deutschen Akademie and the Notgemeinschaft der Deutschen Wissenschaft, Berlin: Verlag von Reimar Hobbing

## a) Journals

List edited and contributed articles to these journals

- List, Friedrich. (ed). (1817c). *Württembergische Archive* (translation: *Archives for Württemberg*)
- List, Friedrich. (ed). (1818-1821). *Volksfreund aus Schwaben. Vaterlands-Blatt für Sitte, Recht und Freiheit*, Stuttgart: Gesellschaft wahrheitliebender Württemberger (translation: Friend of the People of Schwaben)
- List, Friedrich. (ed). (1826). *Der Readinger Adler*, Reading [Pa.]: J. Schneider, 1801-1854 (translation: *The Readinger Eagle*)
- List, Friedrich. (ed). (1834). *Das National-Magazin der Gesellschaft zur Verbreitung gemeinnütziger Kenntnisse*, Leipzig: Gesellschaft zur Verbreitung Gemeinnütziger Kenntnisse
- List, Friedrich and Theodor Toegel. (ed). (1843-1846). *Zollvereinsblatt*, Augsburg: Rieger, Stuttgart: Cotta, Volkart und Rieger, 1843-1849, reprint: Frankfurt am Main 1986 (Most of the 650 articles of this "Customs Union Journal" were written by List)

### **List contributed articles to these journals**

- List, Friedrich. (1834). *Encyklopaedie der Staatswissenschaften*, Altona: J. F. Hammerich (Aka: „Rotteck-Welckersches Staatslexicon“)
- List, Friedrich. (ed). (1835-1837). *Eisenbahn-Journal und National-Magazin für die Fortschritte im Handel, Gewerbe und Ackerbau, für National-Unternehmungen und öffentliche Anstalten, für statistische Nachrichten und neue Entdeckungen jeder Art und für interessante Erscheinungen in der Literatur und Praxis der Nationalökonomie überhaupt*. Altona: Hammer (translation: Railroad Journal and National Magazine for the Progress in Commerce, Industry, and Agriculture, for Public Undertakings and Public Institutions, for Statistical News, for New Inventions of Any Kind and for Interesting Phenomena in the Literature and Practice of National Economy in General).
- List, Friedrich. (1839-). *Augsburger Allgemeine Zeitung*, Augsburg (translation: General Journal for Augsburg)

### **Unknown original year of publication**

- List, Friedrich. (1911). *Grundriss des Römischen Rechts; Ein pädagogischer Versuch*. 4. und 5., verbesserte und um eine Übersicht über das Eherecht nach dem Codex juris canonici vermehrte Auflage, reprint Buttkammer & Mühlbrecht, 1911; Gießen: Roth, 1919 and Baden-Baden: Verlag für Angewandte Wissenschaften, 1962

### **Collected Works and Excerpts**

- List, Friedrich and Ludwig Häusser (ed). (1850-1851). *Friedrich List's Gesammelte Schriften*, Stuttgart, 3 vols.

- List, Friedrich. (1914). *Staatsinteresse und Privatwirtschaft*, eine Auswahl aus den Schriften von Friedrich List (edited by Hildegard Schwab-Felisch), Berlin: Deutsche Bibliothek, no.115
- List, Friedrich. (1927-36). *Werke*. Schriften, Reden, Briefe, 10 vols., Berlin: Reimar Robbing
- Vol. I: Der Kampf um die politische und ökonomische Reform (1815-1825);
- vol. II: Grundlinien einer politischen Ökonomie und andere Beiträge der amerikanischen Zeit (1825-1832);
- vol. III: Schriften zum Verkehrswesen;
- vol. IV: Das natürliche System der politischen Ökonomie (French, 1837; French and German in 1927);
- vol. V: Aufsätze und Abhandlungen aus den Jahren 1831-1844;
- vol. VI: Das nationale System der politischen Ökonomie (1841);
- vol. VII: Die politisch-ökonomische Nationaleinheit der Deutschen: Aufsätze aus dem Zollvereinsblatt und andere Schriften der Spätzeit;
- vol. VIII: Tagebücher und Briefe: 1812-1846;
- vol. IX: Lists Leben in Tag- und Jahresdaten;
- vol. X: Verzeichnisse zur Gesamtausgabe.

### **Originals in English**

- List, Friedrich. (1827a). *Proposals, for publishing a work, to be entitled The American economist*, in two volumes, by Frederick List, of Pennsylvania, formerly professor of political economy, and counsel of the General Society of German Manufacturers and Merchants, for obtaining a German system of political economy. Reading, Pa
- List, Friedrich. (1827b). *Outlines of American Political Economy*, Newly edited and published with a parallel translation in German, Wiesbaden: Dr.Böttiger Verlag. Edited by Michael Liebig, 1997
- List, Friedrich. (1827). Letters with Joseph von Baader: Canals and Railroads in the Free States of America, published in *Ausburger Allgemeine Zeitung*
- List, Friedrich. (1828b). *Letters to Governor Miles of Virginia*, listed in List, 1841a, <<http://kreuzgang.org/pdf/friedrich-list.das-nationale-system-der-politischen-oekonomie.pdf>> , p.223, accessed 2002-06-15
- List, Friedrich. (1828c). Harrisburg Address, 2. Feb. 1828, in *Werke*, Vol. 2, pp. 186-206
- List, Friedrich. (1829a). *Reports on the improvement of the Little Schuylkill*, Reading, Pa. Formerly part of the James Madison Papers, vol. 78, p. 27., Manuscript Division, Library of Congress
- List, Friedrich. (1830b). *On a Commercial Treaty between France and the United States*, listed in List, 1841a, <<http://kreuzgang.org/pdf/friedrich-list.das-nationale-system-der-politischen-oekonomie.pdf>> , p.223, accessed 2002-06-15

- List, Friedrich. (1833a). *Remarks on Mr.Cambreleg's Report on the Tariff*, listed in List, 1841a, <<http://kreuzgang.org/pdf/friedrich-list.das-nationale-system-der-politischen-oekonomie.pdf>> , p.223, accessed 2002-06-15
- List, Friedrich. (1846). *On the Value and Conditions of an Alliance Between Great Britain and Germany*, (Über den Wert und die Bedingungen einer Allianz zwischen Großbritannien und Deutschland)

### **Originals in French**

- List, Friedrich. (1831). *Idees sur les réformes économiques, commerciales et financières, applicables à la France*, in the *Revue Encyclopédique*, March and November 1831, reprinted in F. List, *Werke*, 1927, Vol. V, pp. 59-91
- List, Friedrich. (1835). *Memoire die Eisenbahn von Mannheim nach Basel betreffend*, Without location of publication,
- List, Friedrich. (1837 a). *Le System Naturel de l' Economie Politique. Et la patrie, et l'humanité, Réponse à question de l'Académie des Sciences Morales et Politiques*, Unpublished
- List, Friedrich. (1837 b). *Le Monde Marche. Réponse à la question de l'Académie des Sciences Morales et Politiques. Quelle peut être sur l'économie materielle, sur la vie civile des forces motrices et des moyens de transport qui se propagent actuellement dans le mondes?*, Unpublished

### **b) Translations**

#### **To German**

- List, Friedrich. (1827 a). *Grundriss der amerikanischen politischen Ökonomie*, American original: *Outlines of American Political Economy*, Philadelphia, Penn.: Samuel Parker, Reprinted with a parallel translation in German, Wiesbaden: Dr.Böttiger Verlag. Edited by Michael Liebig, 1996
- List, Friedrich. (1837 a). *Das natürliche System der politischen Ökonomie*, in *Werke. Schriften, Reden, Briefe*, Vol. IV, Berlin: Reimar Robbing, (1927-36), French original: *Le System Naturel de l' Economie Politique*
- List, Friedrich. (1837 b). *Die Welt bewegt sich. Über die Auswirungen der Dampfkraft und der neuen Transportmittel...*, commented and translated from the original in French by Eugen Wendler Göttingen: Vandenhoeck & Ruprecht, 1985 (In English: *The World Moves. On the Effects of Steam Power and the New Means of Transportation*)

#### **To English**

- List, Friedrich. (1837 a). *The Natural System of Political Economy*, English ed. 1927, from the original in French, *Le System Naturel de l' Economie Politique. Et la patrie, et l'humanité*, translated by W. O. Henderson, reprinted in London: Frank Cass, 1983
- List, Friedrich. (1841). *The National System of Political Economy*, British translation, London: Longmans Green, 1885, 1904 and 1928, reprint Fairfield N.J.: Augustus M. Kelley, 1991. US translation by G. A. Matile, including the notes of the French translation by Henri Richelot, Philadelphia: J. B. Lippincott & Co, 1856
- List, Friedrich. (1841). *The National System of Political Economy*, American translation by G. A. Matile, Philadelphia. Lippincott & Co., 1856
- List, Friedrich. (1909). English translation of the introduction to *Das Nationale System der politischen Oekonomie*, in Margaret Hirst, *Life of Friedrich List*, 1909, pp.287-319
- List, Friedrich. (1841). *On the Use of the Railway*, from the German original *Das deutsche Eisenbahnsystem*, 1841, translated by Adrian del Caro, in *The German Mind of the Nineteenth Century*, ed. Hermann Glaser, New York: Continuum, 1981 p. 183 ff

### **To Swedish**

- List, Friedrich. (1840). *Införselsfrihet och skyddsförfattningar*: betraktade ifrån erfarenhetens och historiens synpunkt med företal och tillägg af öfversättaren, Stockholm: P.A. Norstedt & söner. The title reads in English as follows: *Free Import and Protective Regulations – Observed from the Point of View of Experience and History*. It is translated from *Die Freiheit und die Beschränkungen des auswärtigen Handels, aus dem historischen Gesichtspunkt beleuchtet* (1839), preface and translation by Johann Johansson.
- List, Friedrich. (1840). *Om Vigten och Betydelsen af Sløjder och Manufaktur för et Samhälle*, Stockholm: Hörbergsska Boktrykkeriet, preface and translation by Johann Johansson.
- List, Friedrich. (1888). *Det nationalekonomiska systemet*, Stockholm: A.V. Carlssons förlag, reprinted in 1905, preface and translation by Johann Johansson.

### **Secondary literature on List**

- Daastøl, Arno Mong. (1995). *Friedrich List, the Ultimate Globalist: Regulating Entrepreneurship and World Power*.  
 <<http://arno.daastol.com/artprof/listfree.html>>, accessed 2001-06-27  
 First presented at the Maastricht annual seminar on Law and Economics, March 1995, then at the annual Heilbronn conferences on the German tradition in economics, June 1997, at the Center for Environment and Development, Oslo University 1998, admitted

- at the annual EAEPE conference in Bremen, 2002). Quoted by Di-alynas, November 2004
- Daastøl, Arno Mong with Jürgen G. Backhaus. (1996). *Friedrich Lists Einfluss in den Niederlanden*, in Eugen Wendler (ed.) „*Die Vereinigung des europäischen Kontinents*“ *Friedrich List – Die Gesamteuropäische Wirkungsgeschichte seines ökonomischen Denkens*, Stuttgart: Schäffer-Poeschel Verlag, pp. 369-387. Also published as a Working Paper WP/96/012 (1996), Faculty of Economics and Business Administration, University of Limburg, Maastricht
- Daastøl, Arno Mong. (1999). Friedrich List (1798-1846), in Jürgen G. Backhaus. (ed). *The Elgar Companion of Law and Economics*, Cheltenham: Edward Elgar, second edition 2005
- Daastøl, Arno Mong. (2005). Friedrich List (1798-1846), in Jürgen G. Backhaus. (ed). *The Elgar Companion of Law and Economics*, second edition, Cheltenham: Edward Elgar
- Daastøl, Arno Mong. (2007). Friedrich List (1798-1846), in David S. Clark, (ed). *Encyclopaedia of Law and Society: American and Global Perspectives*, Los Angeles, Washington D.C., London, New Delhi, and Singapore: Sage Publications
- Daastøl, Arno Mong. (2013). *Friedrich List's influence in South Africa*, Forthcoming
- Eckert, Robert. (1963). *Der Amerikaaufenthalt Friedrich Lists in seiner Bedeutung für das Listische System*, Inaugural-Dissertation, Friedrich-Alexander-Universität zur Erlangen-Nürnberg
- Freeman, Christopher. (1987). *Technology and Economic Performance: Lessons from Japan*, the chapter: *Technological leadership and trade performance*, London: Pinter
- Henderson, William O. (1983). Editor's Introduction, in List, Friedrich (1837). *The Natural System of Political Economy*, London: Frank Cass & Co. Ltd.
- Heskett, John. (2010). Aspects of Design Policy in History, *SEE Bulletin*, Issue 2, Jan 2010, pp. 3-6
- Hirst, Margaret Esther. (1909). *Life of Friedrich List and Selections from His Writings*, With an Introduction by F. W. Hirst, London: Smith, Elder & Co, New York: Scribner - reviewed in *The Economic Journal*, Vol. 19, No. 75 (Sep., 1909), pp. 432-435, reprinted: New York: Augustus M. Kelley Publishers, Reprints of Economic Classics, 1965
- Hirst, F.W. (1909). Introduction, in Hirst, Margaret E. (1909). *Life of Friedrich List*, pp. 287-313
- Koeppel, Egon. (1936). *Ober die Entstehung der beiden Hauptwerke Friedrich Lists und ihre Beziehungen zueinander*, Diss. Krefeld 1936
- Kristof, Nicholas D. (2007). The New Democratic Scapegoat, *The New York Times*, July 26<sup>th</sup>, 2007  
[http://select.nytimes.com/2007/07/26/opinion/26kristof.html?\\_r=1&oref=slogin](http://select.nytimes.com/2007/07/26/opinion/26kristof.html?_r=1&oref=slogin)



- Levi-Faur, David. (1997). Friedrich List and the Political Economy of the Nation-State, in *Review of International Political Economy*, 4:1, 1997, pp. 154-178
- Lind, Michael. (1998). The Time Is Ripe for the Third Man. *New Statesman*. Volume: 127. Issue: 4411, November 13, 1998, pp. 25 ff
- Lloyd, Sampson S. (1885). Footnote in List, 1841a, p. 126, Lloyd was the British translator of the *National Systems*, in 1885.
- Marx, Karl. (1845). *Draft of an Article on Friedrich List's Book Das Nationale System der Politischen Oekonomie*, in in *Collected Works*, by Karl Marx and Friedrich Engels, New York: International, 1976, 4:266, 279, 281-284
- Nicholson, J. Shield. (1885). Introductory Essay, in List, Friedrich, *The National System of Political Economy*, British translation, London: Longmans Green, 1885, 1904 and 1928, reprint Fairfield N.J.: Augustus M. Kelley, 1991 (no page reference)
- Pausch, Alfons. (1989). *Friedrich List als Steuerfachmann und Zollpolitiker*. Heidelberg: C.F. Müller
- Scholl, Norbert. (2010). *Zeittafel - Friedrich List*, (Timeline) < [www.freenet-homepage.de/friedrichlist/list/zeittafel.html](http://www.freenet-homepage.de/friedrichlist/list/zeittafel.html) >, accessed 2010.05.10, through Google's buffer archive
- Schnitzer, Karl Friedrich. (1851). *Friedrich List, ein Vorläufer und ein Opfer für das Vaterland: ein Gedenkbüchlein für das deutsche Volk*, Stuttgart : Beck und Fränkel, reprint 1877
- Weippert, Georg. (1956). *Der späte List: Ein Beitrag zur Grundlegung der Wissenschaft von der Politik und zur politischen Ökonomie als Gestaltungslehre der Wirtschaft*, Erlangen

## Related literature

- Aall, Herman Harris. (1939). *Verdensdespotiet og havets frihet*, Oslo: Nikolai Olsen, also translated as *Weltherrschaft und die Rechtlosigkeit der Meere*, Essen: Essener Verlagsanstalt, 1940
- Abramowitz, Moses. (1956). Resource and Output Trends in the US since 1870, *The American Economic Review*, Vol. 46, No. 2, Papers and Proceedings of the Sixty-eighth Annual Meeting of the American Economic Association (May, 1956), pp. 5-23
- Adams, Brooks. (1900). *America's economic supremacy*, London: Macmillan
- Amery, Leo S. (Leopoldo Charles Maurice Stennett) (1906). *The Fundamental Fallacies of Free Trade*, London: The National Review
- Andvig, Jens Christoffer. (1980). *Ragnar Frisch and Monetary Reform Movements in the Thirties*, Memorandum, Oslo: Institute of Economics, University of Oslo
- Anderson, Matthew Smith. (1987). *Europe in the Eighteenth Century, 1713-1783*, 3.ed. (1961), London: Longman
- Anners, Erik. (1983). *Den europeiske rettens historie*, Oslo: Universitetsforlaget

- Aristotle (350 BC). *Politica*, in The Works of Aristotle, 12 vols., edited by Sir David Ross, The Oxford Aristotle, Oxford: Oxford University Press, 1908-1952
- Aukrust, Odd. (1958). *Investeringer og økonomisk vekst*, Oslo: Statistisk sentralbyrå
- Aukrust, Odd and Juul Bjerke. (1958) *Real kapital og økonomisk vekst 1900-1956*, Artikkel no. 4, Oslo: Statistisk sentralbyrå
- Avineri, Shlomo. (1972). *Hegel's Theory of the Modern State*, Cambridge: Cambridge University Press
- Backhaus, Jürgen G. (1985). An Essay on Keynesianism in Germany, in:  
T. Lawson, M.H. Pesaran (eds. for the Cambridge Journal of Economics), *Keynes' Economics: Methodological Issues*, London: Croom Helm - Armonk, NY: Sharpe, pp. 209-253
- Backhaus, Jürgen G. and Günther Krause. (eds). (1997). *On Political Economy of Transformation, Country Studies*, Metropolis Verlag: Magdeburg
- Backhaus, Jürgen G. (2002). Fiscal sociology: What for? in American Journal of Economics and Sociology, January 2002, pp. 57-77
- Backhaus, Jürgen G. (ed.). (2011). *The State as Utopia*, The European Heritage in Economics and the Social Sciences Volume 9, 2011
- Backhaus, Jürgen G. (2011). *Why Greece should be bailed out*, Lecture given at the University of Thessaly, Volos, Greece, 14<sup>th</sup> April, 2011
- Bacon, Francis. (1601). *Of the True Greatness of Kingdoms and Estates*, no. 19 of Essays Civil and Moral, in *The Works of Francis Bacon*, ed. James Spedding, Robert Leslie Ellis, and Douglas Denon Heath, Boston: Houghton Mifflin, 1840
- Ball, Alan M. (1987). *Russia's Last Capitalists. The NEPmen, 1921-1929*, Berkeley: University of California Press
- Bakunin, Mikhail Aleksandrovich. (1871). *Dieu et l'état*, first translated, edited and posthumously published by Carlo Cafiero and Élisée Reclus, first translated further by Benjamin Tucker as *God and the State*, New Hampshire: Dover, 1882, originally titled by Bakunin, 'The Historical Sophisms of the Doctrinaire School of Communism', an excerpt is reprinted in Bakunin, Mikhail. (1971) *Bakunin on Anarchy*, ... pp. 225-243
- Bakunin, Mikhail Aleksandrovich. (1872). The International and Karl Marx, reprinted in Bakunin, Mikhail. (1971) *Bakunin on Anarchy*, ... pp. 286-320
- Bakunin, Mikhail Aleksandrovich. (1873). *Gosudarstvennost' i anarkhiia*, translated from Russian as *Statism and Anarchy*, in Bakunin, 1971, pp. 322-350, also reprinted by Cambridge University Press, 2005
- Bakunin, Mikhail Aleksandrovich. (1971). *Bakunin on Anarchy*, Selected Works by the Activist-Founder of World Anarchism, edited, translated and with an introduction by Sam Dolgoff, London: George Allen & Unwin

- Bairoch, Paul. (1983). *Economy and World History: Myths and Paradoxes*, Chicago: University of Chicago Press.
- Barro, R. and Sala-I-Martin. (2003). *Economic Growth*, 2<sup>nd</sup> edition, Cambridge, MA: MIT Press
- Bawerk, Eugen Böhm von. (1888). *Positive Theorie des Kapital*, Innsbruck, translated by William A. Smart as *Positive Theory of Capital*, London: Macmillan, 1891
- BBC. (2010). *The year in business: 2010*, 27 December 2010, 08:58 GMT, <<http://www.bbc.co.uk/news/mobile/business-12037133>>, accessed 2011-01-03
- BBC News. (2011). China 'to overtake US on science' in two years, *BBC News*, 28 March 2011, <<http://www.bbc.co.uk/news/science-environment-12885271>>, accessed 2011-04-02
- BBC World. (2012). Cleaner Energy, *Horizons*, number 20, 8<sup>th</sup> Dec. 2012, <<http://www.horizonsbusiness.com/episode/cleaner-energy/>> , accessed 2012-12-08
- Becker, Gary Stanley. (1964). *Human Capital: a Theoretical and Empirical Analysis, with Special Reference to Education*, New York: Columbia University Press.
- Beiser, Frederick C. (ed.) (1993). *The Cambridge Companion to Hegel*, Cambridge: Cambridge University Press
- Beiser, Frederick C. (2005). *Hegel*, Routledge, Taylor and Francis Group
- Bergh, Trond og Tore J. Hanisch. (1984). *Vitenskap og Politikk. Linjer i norsk sosialøkonomi gjennom 150 år*, Oslo: Aschehoug
- Bergheim, Stefan. (2005). Human capital is the key to growth, Success Stories and Policies for 2020, Key findings of DB-Research: Global growth centers 2020, DB-Research, 1. August 2005, Frankfurt a.M.: Deutsche Bank Research
- Bernstein, Richard J. (1976). *The Restructuring of Social and Political Theory*, Oxford: Basil Blackwell, and in London: Methuen
- Biedermann, Hermann Ignaz. (1870). *Über den Merkantilismus*. Vortrag gehalten bei veröffentlichung der preisaufgaben für 1869/70 an der K. K. Universität zu Innsbruck von deren gegenwärtigem rector H. J. Biedermann. Mit zusätzen und anmerkungen des verfassers, Innsbruck: Wagner
- Bjørseth, Brynjolf. (1934). *Distribute or Destroy. A survey of the world's glut of goods with a description of various proposals and practical experiments for its distribution*, London: Nott, 1936, reprint 1939, translation by Eric and Ian de Mare of the original in Norwegian: *Efter oss kommer overfloden*, Oslo: H.Aschehoug & Co.
- Blair, Gavin. (2012). As red ink flows, Japanese firms struggle to keep manufacturing at home, *Christian Science Monitor*, 3. Feb. 2012, <http://www.csmonitor.com/World/Asia-Pacific/2012/0203/As-red-ink-flows-Japanese-firms-struggle-to-keep-manufacturing-at-home> Accessed 2012-02-24
- Blaug, Mark. (1975). The economics of education in English classical political economy: a re-examination, in A. S. Skinner and T. Wilson (eds). (1975). *Essays on Adam Smith*, Oxford: Clarendon Press

- Blaug, Mark (1980). *The Methodology of Economics - or how Economists Explain*, Cambridge & New York: Cambridge University Press
- Bourdieu, Pierre. (1983). Ökonomisches Kapital, kulturelles Kapital, soziales Kapital, in Kreckel, Reinhard. (ed). (1983). *Soziale Ungleichheiten*, Soziale Welt, Sonderheft 2, Goettingen: Otto Schartz & Co, pp. 183-98. Translated by Richard Nice as *The forms of capital*, in J. Richardson (ed.) *Handbook of Theory and Research for the Sociology of Education*, New York: Greenwood, 1986, pp. 241-258.
- Braudel, Ferdinand. (1985). The Perspectives of the World, in Braudel, Ferdinand. (1985). *Civilisation & Capitalism, 15th-18th Century*, Vol. III, London: Fontana Press
- Braudel, Ferdinand. (1985). *Civilisation & Capitalism, 15th-18th Century*, London: Fontana Press.
- Brougham, Henry. (1816). Edinburgh: A. and C. Black, The Speech of H. Brougham Esq. M P., in the House of Commons, April 9th, 1816, upon the State of the Agriculture of the United Kingdom, *The Edinburgh Review*, pp. 255-281
- Brzezinski, Zbigniew. (1970). *Between Two Ages: American's Role in the Technotronic Era*, New York: Viking
- Brzezinski, Zbigniew. (1997). *The Grand Chessboard – American Primacy and It's Geostrategic Imperatives*, Basic Books
- Gilbert, Bentley Brinkerhoff. (1987). *David Lloyd George: A Political Life*. Ohio State University Press
- Brochmann, B.Dybvad. (1922). *Eksakt vurdering og Verdilære*, Bergen: eget forlag 1959 (private printing)
- Brochmann, Bertram Dybvad. (1923). *Nøklen. Veien til det nye land: (Aandsrev)*, Bergen: eget forlag (private printing)
- Brochmann, Bertram Dybvad. (1956). *Real økonomi kontra fiktiv økonomi. Sparing i overflodens tidsalder. Hvorfor Norge spiller fallitt (Real Economy Contra Fictive Economy. Saving in the Time of Abundance. Why Norway goes bust)*, Bergen: Det Nye Samfund
- Brofoss, Erik. (1960). Letter from Brofoss to Frisch, *Frisch papers*, University of Bergen, 1960.10.24, quoted in Bergh and Hanisch, 1984, p. 234
- Buchanan. James M. (1965). An Economic Theory of Clubs. *Economica*, February 1965, Blackwell Publishing, Vol. 32, No. 125, pp. 1-14
- Buchanan, Patrick. (1991). *America Asleep. The Free Trade Syndrome and the Global Economic Challenge. A New Conservative Foreign Economic Policy for America*, U. S. Business & Industrial Council Education Foundation
- Buchanan, Patrick. (1998). *The Great Betrayal: How American Sovereignty and Social Justice Are Being Sacrificed to the Gods of the Global Economy*, Boston, Mass.: Little, Brown and Company
- Burke, Edmund. (1790). *Reflections on the Revolution in France, and on the Proceedings in Certain Societies in London Relative to that Event, in a Letter Intended to Have Been Sent to a Gentleman in Paris*, London: J. Dodsley

- Burt, Ronald S. (2005). *Brokerage and Closure. An Introduction to Social Capital*, Oxford: Oxford University Press
- Burt, Edwin Arthur. (1924). *The Metaphysical Foundations of Modern Physical Science: A Historical and Critical Essay*, London: Kegan Paul, reprint N.Y.: Anchor, 1954
- Bush, George Walker. (2002). *President Announces Temporary Safeguards for Steel Industry*, Statement by the President, March 5, 2002, accessed 2010-04-06  
< <http://georgewbush-whitehouse.archives.gov/news/releases/2002/03/20020305-6.html> >
- Bücher, Karl Wilhelm. (1893). *Die Entstehung der Volkswirtschaft*, Tübingen: Verlag Der H. Laup'schen Buchhandlung, English translation from the third German Edition, by S. Morley Wickett, *Industrial Evolution*, 1901, reprint: Burt Franklin, 1967, and New York: Bantan, 1984
- Cain, P.J. and A.G Hopkins. (1993). *British Imperialism*, Vol. I 1688-1914, London: Longman
- Caldwell, John C. (1980). Mass Education as a Determinant of the Timing of Fertility Decline, *Population and Development Review* 6 (June), 1980, pp. 225-255
- Calleo, David. (2001). *Rethinking Europe's Future*. Princeton: Princeton University Press
- Cannan, Edwin. (1898). *A History of the Theories of Production and Distribution in English Political Economy from 1776 to 1848*, 3.ed., London: King, 1924
- Cannan, Edwin. (1904). Preface and Introduction to Adam Smith's *Wealth of Nations*, London: Methuen & Co., Ltd., pp. v-viii and pp. xiii-xlvi <http://www.econlib.org/library/Smith/smWN0.html> >, accessed 2008-11-28
- Cannan, Edwin. (1921). Early History of the Term Capital, *Quarterly Journal of Economics*, volume 35, 1921, pp. 469-481
- Cannan, Edwin. (1929). *A Review of Economic Theory*, London: King and Son, 1929; 2nd edition, 1930
- Carey, Henry Charles. (1837). *Principles of Political Economy*, Philadelphia Penn.: Carey, Lea & Blanchard
- Carey, Henry C. (1851). *Harmony of Interests: Agricultural, Manufacturing and Commercial*, Philadelphia: Skinner, reprinted by Augustus M. Kelley Publishers, New York, 1967
- Carey, Henry C. (1864). *Financial crisis: their causes and effects*, Philadelphia: Henry Carey Baird
- Carey, Matthew. (1829). *Autobiographical Sketches. In a series of Letters Addressed to a Friend*. Volume I: *Containing a view of the Rise and Progress of the American System: The Efforts made to secure its Establishment: the Causes which prevented its Complete Success*, &c. Philadelphia: John Clarke, no. 7, Franklin Place, reprint, New York: Series: The American Journalists, Arno, 1970

- Cassirer, Ernst. (1906). *Das Erkenntnisproblem in der Philosophie und Wissenschaft der neueren Zeit*, Berlin: Verlag Cassirer
- Cassirer, Ernst. (1932). *Die platonische Renaissance in England und die Schule von Cambridge*, Leipzig and Berlin: B. G. Teubner, translated by James P. Pettegrove as *The Platonic Renaissance in England*, Austin: University of Texas Press, 1953, reprinted in New York: Gordian Press, 1970
- Cassirer, Ernst. (1942). *Zur Logik der Kulturwissenschaften*. Göteborg: Göteborgs Högskolas Årsskrift 47, translated by Clarence Smith Howe as *The Logic of the Humanities*, New Haven: Yale University Press, 1961
- Cassirer, Ernst. (1944). *An Essay on Man*, New Haven, Yale University Press, reprint 1972
- Chan, Catherine. (2011). China's Luxury Goods Boom, *The Diplomat*, February 2, 2011, < <http://thediplomat.com/china-power/chinas-luxury-goods-boom/> > , accessed 2011-05-25
- Cheung, Steven N. S. (1987). Economic organization and transaction cost, *The New Palgrave: A Dictionary of Economics* vol. 2, pp. 55–58
- Cipolla, Carlo M. (1974). *The Economic History of the World Population*, Harmondsworth: Pelican, Penguin Books, reprint 1978
- Clarke, John Bates. (1924). *The Distribution of Wealth. A Theory of Wages, Interest and Profits*, London: Macmillan
- Coleman, D.C. (1987). *History and the Economic Past. An Account of the Rise and Decline of Economic History in Britain*, Oxford: Clarendon Press
- Committee of Commerce and Manufactures. (1816). Report of the Committee of Commerce and Manufactures to the House of Representatives of the Congress of the United States, Feb. 13, 1816, referred to in List, 1841, ch. 7, note 2
- Commons, John. (1893). *The Distribution of Wealth*, New York & London: Macmillan, reprint: Fairfield NJ: Kelley, 1963
- Condorcet, Marie Jean Antoine Nicolas, Marquis de Condorcet. (1786). *Vie de Monsieur Turgot*, translation in English: *Life of Turgot: Comptroller general of the finances of France, in the years 1774, 1775, and 1776*, London: St. Paul's, 1787
- Cooper, Thomas. (1826). *Lectures on the Elements of Political Economy*, Charleston: D.E. Sweeny
- Cooper, Thomas. (1831). *Outline of the Doctrine of the Association of Ideas*, in Broussais, François Joseph Victor. (1831). *On Irritation and Insanity*, translated into English by Thomas Cooper, Columbia, S.C.: S. J. M'Morris
- Cooper, Thomas. (1831). *The Scripture Doctrine of Materialism*, in Broussais, François Joseph Victor. (1831). *On Irritation and Insanity*, translated into English by Thomas Cooper, Columbia, S.C.: S. J. M'Morris
- Cooper, Thomas. (1831). *View of the Metaphysical and Physiological Arguments in favor of Materialism*, in Broussais, François Joseph Vic-

- tor. (1831). *On Irritation and Insanity*, translated into English by Thomas Cooper, Columbia, S.C.: S. J. M'Morris
- Corliss, William Roger. (1999). *Ancient Infrastructure: Remarkable Roads, Mines, Walls, Mounds, Stone Circles*, Glen Arm, MD: Sourcebook Project
- Coudenhove-Kalergi, Richard N. (1943) *Crusade for Pan-Europe. Autobiography of a Man and a Movement*, New York: G. P. Putnam's Sons
- Cousin, Victor. (1846). *Cours de l'histoire de la philosophie moderne*, Paris: Ladrangue
- Cowen M.P. and R.W. Shenton. (1996). *Doctrines of Development*, London and New York: Routledge
- Cypher, James M. and James L. Dietz. (1998). Static and Dynamic Comparative Advantage: A Multi-Period Analysis with Declining Terms of Trade, *Journal of Economic Issues*, Vol. 32, 1998, pp. 305-314
- Daastøl, Arno Mong. (1992). *Fortolkning og generalisering - empirisme og rasjonalisme som tradisjoner innen økonomisk metodologi*, Institute for Social Economics, University of Oslo ("Interpretation and generalisation - Empiricism og Rationalism as Traditions within the Methodology of Economics" - in Germany, Britain, and Norway)
- Daastøl, Arno Mong. (1997). Shock-Therapy Rent-Seeking or Mercantilist Rent Creation. Transportation, Credit and Raw Materials in the Russian Transformation, in Backhaus, Jürgen G. and Günther Krause. (eds). (1997). *On Political Economy of Transformation*. Country Studies, Metropolis Verlag: Magdeburg
- Daastøl, Arno Mong. (2000). Transportation and Civil Liberties, Karl Bücher's Contribution, in Backhaus, Jürgen G. (ed.). *Karl Bücher. Theory, History, Anthropology. Non Market Economics*, pp. 389-407, Marbrug: Metropolis
- Daastøl, Arno Mong. (2007). Høyhastighetstog er gammeldags: Sats på GTS, *Samferdsel*, Nov. 2007 (i.e. High Speed Rail is Old Fashioned - Go for GTS)
- Daastøl, Arno Mong and Johannes Michael Hanel. (2011). Developing Society According to Man's Development, in Backhaus, Jürgen G. (ed.). (2011). *The State as Utopia*, The European Heritage in Economics and the Social Sciences Volume 9, 2011, pp 115-159
- Dangerfield, George. (1936). *The Strange Death of Liberal England*, London: Paladin
- Darwin, Charles. (1859). *On the Origin of Species by Means of Natural Selection: or the Preservation of Favoured Races in the Struggle for Life*, London: J. Murray
- Davies, Megan. (2004). Some on Wall Street see big markets drama in 2005, *Reuters*, Thu Dec 23, 2004 01:00 PM ET, <[http://yahoo.reuters.com/financeQuoteCompanyNewsArticle.jhtml?duid=mtfh21158\\_2004-12-23\\_18-00-05\\_n23379455\\_newsml](http://yahoo.reuters.com/financeQuoteCompanyNewsArticle.jhtml?duid=mtfh21158_2004-12-23_18-00-05_n23379455_newsml)>, accessed 2004-12-30
- Descartes, René. (1637). *Meditationes de prima philosophia, in qua Dei existentia et animæ immortalitas demonstrator*, translated as *Medi-*

- tations on First Philosophy, in *Discourse on Method and the Meditations*, Harmondsworth: Penguin Classics, 1971
- Deutsche Welle. (2011). German car sales, exports expected to take off in 2011, 10.01.2011, <<http://www.dw-world.de/dw/article/0,,14756729,00.html>>, accessed 2011-02-03
- Dialynas, Chris. (2004). *Trouble Ahead - Trouble Behind, Restructuring the Global Economy - A New Marshall Plan*, <[www.pimco.com/LeftNav/Latest+Publications/2004/Dialynas+Paper.htm](http://www.pimco.com/LeftNav/Latest+Publications/2004/Dialynas+Paper.htm)>, accessed 2004-12-30
- Diehl, Karl. (1911). *Anarchismus, Kommunismus, und Sozialismus*, Jena: Verlag Gustav Fischer
- Dimić, Zoran. (2003). The Problem of Education in Fichte's Philosophy, *FACTA UNIVERSITATIS*, Series: Philosophy, Sociology and Psychology, Vol. 2, No. 10, 2003, pp. 777 – 788 <[http://www.academia.edu/1599822/The\\_Problem\\_of\\_Education\\_in\\_Fichtes\\_Philosophy](http://www.academia.edu/1599822/The_Problem_of_Education_in_Fichtes_Philosophy)>, accessed 2011-10-18
- Dillard, Dudley. (1967). *Economic Development of the North Atlantic Community, Historical Introduction to Economics*, Englewood Cliffs, N.J.: Prentice Hall. An edited translation of the original into Norwegian: *Moderne økonomisk historie, Den økonomiske utvikling i Vest-Europa, USA og Sovjet 1870-1939*, Oslo: Gyldendal, 1973
- Dornbusch, Rudiger and Stanley Fischer. (1978). *Macroeconomics*, N.Y.: McGraw-Hill Inc.
- Diwald, Hellmut. (1980). *Der Kampf um die Weltmeere*, München: Droemer Knaur
- Droz, Joseph. (1829). *Economie politique ou principes de la science des richesses*, Paris: Paul Renouard
- Dullien, Sebastian. (2009). *Central Banking, Financial Institutions And Credit Creation In Developing Countries*, United Nations Conference on Trade and Development, UNCTAD Discussion Papers, number 193, Geneva: UNCTAD
- Durkheim, David Émile. (1893). *De La Division Du Travail Social*, Paris: Alcan, translated by George Simpson as *The Division of Labor in Society*, New York: Macmillan; and The Free Press, 1933, 1947, 1966. An improved re-translation by W.D. Halls, with an introduction by Lewis A. Coser; New York: Free Press, 1984, 1997
- Dumas, Alexandre (Dumas Davy de la Pailleterie). (1850), *La Tulipe noire*, Paris: Baudry, translated in English as *The Three Musketeers and The Black Tulip*, London: Penguin Classics, New Ed edition, 2003
- Dupin, Charles. (1827). *Forces productives et commerciales de la France*, 2 vols. Paris: Bachelier
- Earle, Edward Mead. (1943a). *Makers of Modern Strategy. Military Thought from Machiavelli to Hitler*. With the collaboration of Gordon A. Craig and Felix Gilbert, Princeton: Princeton University Press. Second edition, edited by Peter Paret, Gordon A. Craig and Felix Gilbert: *Makers of Modern Strategy. Military Thought from Machia-*



- velli to the Nuclear Age*, Princeton, N.J.: Princeton University Press, 1986
- Earle, Edward Mead. (1943b). Adam Smith, Alexander Hamilton, Friedrich List: The Economic Foundations of Military Power, Chapter 6 in; Earle, Edward Mead. (1943a). *Makers of Modern Strategy. Military Thought from Machiavelli to Hitler*. With the collaboration of Gordon A. Craig and Felix Gilbert, Princeton: Princeton University Press
- Eatwell, John, Murray Milgate, and Peter Newman (eds.). *Marxian economics*, London: Norton
- Economist, The. (2008). Asian optimism, European gloom, A chill wind from the West, January 13<sup>th</sup>, 2011  
<[http://www.economist.com/blogs/banyan/2011/01/asian\\_optimism\\_european\\_gloom](http://www.economist.com/blogs/banyan/2011/01/asian_optimism_european_gloom)>, accessed 2011-01-20
- Economist, The. (2010). The miracle of the cerrado, Feb 26th 2010, <<http://www.economist.com/node/16886442>> , accessed 2011-02-28
- Economist, The. (2011). A prospect of plenty. For the first time in history, the whole of mankind may get enough to eat, Special report - Feeding the world The 9 billion-people question, Feb 24th 2011, <<http://www.economist.com/node/18200642>> , accessed 2011-02-28
- Edquist, Charles. (1997), *Systems of Innovation: Technologies, Institutions, and Organizations*, London: Pinter
- Encarta Encyclopaedia. (2009). 'Friedrich Ratzel' and 'Geography', *Encarta Encyclopaedia*, Redmond, Wa: Microsoft Corporation
- Encyclopaedia Britannica. (2009). Articles on: *Otto von Bismarck*, *Friedrich List*; *Friedrich Ratzel*; *Halford J. Mackinder*, *International Trade*; *Zollverein*, Chicago: Encyclopaedia Britannica
- European Commission. (2005). *Public Procurement for Research and Innovation. Expert Group Report. Developing procurement practices favourable to R&D and innovation*. EUR 21793 EN, September 2005 (the so-called 'Wilkinson-report')
- European Commission. (2011). *Roadmap to a Single European Transport Area - Towards a competitive and resource efficient transport system*, White Paper for Transport 2011, Brussels: European Commission
- Evans, Samuel. (1912). Preference and Protection in South Africa, in *The Burden of Protection*, Westminster: King & Son, pp. 82-106
- Fallows, James. (1993). How the world works, *The Atlantic Monthly*, December 1993, pp. 61-87
- Fawcett, Henry. (1883). *Manual of Political Economy*, 6.ed. (1<sup>st</sup> ed. 1863), London: Macmillan
- Ferguson, C. E. and J. P. Gould (1975). *Microeconomic Theory*, Homewood, Irwin
- Ferguson, Niall. (1997). *The Pity of War: Explaining World War I*, London: The Penguin Press, Allen Lane

- Ferguson, Niall. (2008). *The Ascent of Money. A Financial History of the World*, New York: The Penguin Press, Allen Lane
- Fichte, Gotlieb. (1799). *Bestimmung des Menschen*, translated by William Smith as *The Vocation of Man*, 1846, in *The Popular Works of Johann Gottlieb Fichte*, Vol. I Trübner & Co. London, 4<sup>th</sup> ed., 1889
- Fichte, Johann Gottlieb. (1800). *Der Geschlossene Handelstaat*, Leipzig: Druck und Verlag Philipp Reclam jun., reprinted Hamburg: Felix Meiner Verlag, 1979, translated as *The Closed Commercial State*, Contemporary Continental Philosophy, edited by Anthony Curtis Adler, South Korea: SUNY Press
- Fichte, Gotlieb. (1806). *Reden an die deutsche Nation*, edited and with introduction by Immanuel Hermann Fichte, Leipzig: F.A. Brockhaus, 1871, translated by R.F. Jones and G.H. Turnbull as *Addresses to the German Nation*, Chicago: The Open Court Publishing Co, 1922
- Financial Times. (2006). China overtakes Japan on R&D, By Geoff Dyer in Shanghai, December 3 2006, <<http://www.ft.com/cms/s/da4ed9f2-82fa-11db-a38a-0000779e2340.html>>, accessed 2006-12-06
- Fischer, Anthony. (1981). *Resource and Environmental Economics*, Cambridge: Cambridge University Press
- Fisher, Admiral of the Fleet Lord John Arbuthnot. (1919a). *Memories*, London, New York and Toronto: Hodder and Stoughton
- Fisher, Admiral of the Fleet Lord John Arbuthnot. (1919b). *Records*, London, New York and Toronto: Hodder and Stoughton
- Forbes. (2005). Trading Troubles, interview with PIMCO's Chris Dyalynas, by Dan Ackman, *Forbes*, 2005-11-05, <[http://www.forbes.com/business/2005/01/10/cx\\_da\\_0110doomtrade.html](http://www.forbes.com/business/2005/01/10/cx_da_0110doomtrade.html)>, accessed 01.11.05
- Freeman, Christopher. (1982-2003). *Technological infrastructure and international competitiveness*, Draft paper submitted to the OECD Ad Hoc Group on Science, Technology and Competitiveness. August 1982 (mimeo). Published by *Industrial and Corporate Change*, Volume 13, Number 3, pp. 541-569. Reprint for the The First Globelics Conference 'Innovation Systems and Development Strategies for the Third Millennium', Rio de Janeiro, November 2-6, 2003
- Freeman, Christopher. (1987). *Technology and Economic Performance: Lessons from Japan*, London: Pinter
- Freeman, Christopher. (1995). The National System of Innovation in Historical Perspective, *Cambridge Journal of Economics*, No. 19, pp. 5-24
- Friedman, Milton. (1953). The Methodology of Positive Economics, in *Essays in Positive Economics*, Chicago: University of Chicago Press
- Friedman, Milton and Anna J. Schwartz. (1969). The Definition of Money: Net Wealth and Neutrality as Criteria, *Journal of Money, Credit and Banking*, Vol. 1, No. 1 (Feb., 1969), pp. 1-14

- Friedman, Milton. (1988). Why the Twin Deficits are a Blessing, New York: *Wall Street Journal*, Dec. 14, 1988
- Friedrich II of Prussia (and François-Marie Arouet 'Voltaire'). (1740). *L'Anti-Machiavel, ou Examen du Prince de Machiavel*, Bruxelles: François Foppens, translated into English as *Anti-Machiavelli* <<http://www.webcitation.org/5knIOQbEF>>, accessed 2010-04-12
- Frisch, Ragnar. (1932). *Statens plikt til cirkulasjonsregulering*, Memorandum from the Department of Economics, University of Oslo, January 11, 1951 ('The Duty of the State to Regulate Circulation'), Written in a hurry, December 10-12, 1932
- Frisch, Ragnar. (1933). *Sparing og cirkulasjonsregulering*, Oslo: Fabritius & Sønners Forlag ('Saving and regulation of circulation')
- Frisch, Ragnar. (1934). Circulation Planning, *Econometrica*, pp.258-336
- Frisch, Ragnar. (1947). *Noen trekk av konjunkturlæren (Med et tillegg om levestandard og prisindeks)*, Oslo: H. Aschehoug & Co
- Frisch, Ragnar. (1962). Preface to the Oslo Channeling Model, in Frisch, Ragnar. (1976). *Economic Planning Studies. A Collection of Essays*, Selected, Introduced and Edited by Frank Long, Preface by Jan Tinbergen, Dordrecht and Boston: D. Reidel Publishing Company, pp. 87-128
- Gadamer, Hans-Georg. (1962). *Wahrheit und Methode*, Tübingen: Mohr (Paul Siebeck)
- Galton, Francis. (1869). *Hereditary Genius: an inquiry into its laws and consequences*, London: Macmillan, Reprint: New London: Friedman, 1978
- Ganilh, Charles. (1815). *Théorie d'économie politique*, Paris : Treuttel et Würtz
- Gazdar, Kaevan. (1998). *Germany's Balanced Development: The Real Wealth of a Nation*, Westport, CT: Quorum Books
- Georgescu-Roegen, Nicholas. (1971). *The Entropy Law and the Economic Process*, Cambridge, Mass.: Harvard U.P., reprint 1981
- Gerschenkron, A. (1962). *Economic Backwardness in Historical Perspective*, London: Harvard University Press
- Gibson, Donald. (1995). *Battling Wall Street: The Kennedy Presidency*, New York: Sheridan Square Press
- Gide, Charles and Charles Rist. (1915). *A History of Economic Doctrines from the Time of the Physiocrats to the Present Day*, London, George P. Harrap, translated by R. Richards, from the second edition of the original *Histoire Des Doctrines Économiques: Depuis Les Physiocrates*, Paris: L. Larose & L. Tenin, 1913, (first edition 1909) , reprint, Paris: Recueil Sirey, 1947
- Gierløff, Christian. (1945). *To ganger 9. april: bruddstykker av illegal litteratur om 900-års krigen for tusenårsriket*, Kragerø: Naper
- Gipson, Lawrence Henry. (1954). *The Coming of the Revolution, 1763-1775*, The New American Nation Series, New York: Harper & Brothers

- Godwin, William. (1793). *An Enquiry concerning Political Justice, and its Influence on General Virtue and Happiness*, 2 volumes, London: G. G. & J. Robinson
- Goodfellow, D. M. (1931). *A Modern Economic History of South Africa*, London; George Routledge & Sons, Ltd.
- Goodwin, Craufurd D. W. (1961). *Canadian economic thought, the political economy of a developing nation, 1814-1914*, Durham, NC: Duke University Press
- Gravelle, Hugh and Ray Rees. (1981). *Microeconomics*, London and New York: Longman
- Greeley, Horace. (1870). *Essays Designed to Elucidate The Science of Political Economy, While Serving To Explain and Defend The Policy of Protection to Home Industry, As a System of National Cooperation For True Elevation of Labor*, Boston: Fields, Osgood & Co.
- Gregor, A. James. (1995). *Marxism, China, & Development: Reflections on Theory and Reality*, New Brunswick, N.J.: Transaction Publisher
- Gregor, A. James. (2000). *A Place in the Sun, Marxism and Fascism in China's Long Revolution*, Boulder, Col: Westview
- Grimmer-Solem, Erik (2003). *The Rise of Historical Economics and Social Reform in Germany, 1864-1894*. Oxford - New York: Oxford University Press
- Groenewegen, Peter D. and Bruce J. McFarlane. (1990). *A History of Australian Economic Thought*, London: Routledge
- Gross, William H. (2011). *Skunked. Investment Outlook April 2011*, <<http://www.pimco.com/EN/insights/pages/skunked.aspx>> , accessed 2011-05-20
- Grotius, Hugo. (1609). *Mare Liberum*, in *De Indis*, chapter 12, Leiden, translated as *The Free Sea*, ed. David Armitage, Indianapolis: Liberty Fund, 2004
- "Group". (1952). *De økonomiske virkemidler*, report by a group of economists at the Ministry of Finance in Norway, Oslo: Archive of the Ministry of Finance, 1952.11.25, quoted in Berg and Hanisch, 1984, p. 234
- Grunzel, Josef. (1916). *Economic protectionism*, edited by Eugen von Philippovich, London, New York and Oxford: Clarendon press; Humphrey Milford
- Haavelmo, Trygve. (1962). *Innledning til høyere kurs i økonomisk teori*, Memorandum, 1.juli 1962, Oslo: Sosialøkonomisk institutt, Universitetet i Oslo ('Introduction to a higher course in economic theory')
- Haavelmo, Trygve. (1989). Econometrics and the Welfare State, Banquet Speech, at the reception of the Nobel Prize, *The Nobel Prizes 1989*, edited by Tore Frängsmyr, Stockholm: Nobel Foundation, 1990, also in *Nobel Lectures, Economics 1981-1990*, edited by Karl-Göran Mäler, World Scientific Publishing Co., Singapore, 1992, and in *American Economic Review*, 87(supplement), December 1997, pp. 13-17
- Habermas, Jürgen. (1968). *Technik und Wissenschaft als „Ideologie“*, Frankfurt am Main: Suhrkamp, translated as *Technology and Sci-*

- ence as Ideology, in Habermas, Jürgen. (1970). *Toward a Rational Society: Student Protest, Science, and Politics*, trans. Jeremy J. Shapiro. Boston: Beacon Press
- Habermas, Jürgen. (1970). *Toward a Rational Society: Student Protest, Science, and Politics*, trans. Jeremy J. Shapiro. Boston: Beacon Press
- Hamilton, Alexander. (1790-1791). *Reports of the Secretary of the Treasury of the United States, on Public Credit, on a National Bank, on Manufactures, and on the Establishment of a Mint ...* Dept. of the Treasury, Printed by D. Green, 1828, reprinted as *The Reports of Alexander Hamilton*, by Jacob E. Cooke (ed.), New York, Evanston and London: Harper & Row, 1964, also in *The Works of Alexander Hamilton*, ed. Henry Cabot Lodge (Federal Edition), New York: G.P. Putnam's Sons, 1904, 12 vols. Reprinted 1964, New York and London: Harper Torchbook
- Hancock, James Gulliver. (2009). Is Optimism a Competitive Advantage, The Case for Optimism, *Business Week*, August 24 and 31, 2009, p.52
- Hardin, Garrett. (1968). The Tragedy of the Commons. *Science*, December 1968, Vol. 162, no. 3859, pp. 1243–1248
- Harper, L. (1939). *The English Navigation Acts: A Seventeenth Century Experiment in Social Engineering*, New York: Columbia University Press.
- Hart, Basil Henry Liddell. (1970). *History of the Second World War*, London: Faber & Faber New York: Putman & Sons
- Hayek, Friedrich August von. (1976). Denationalisation of Money. An analysis of the theory and practice of concurrent currencies. Hobart Paper Special Nr. 70, *Kyklos: international review for social sciences*, Oxford : Wiley-Blackwell
- Hayek, Friedrich August von. (1978). *Denationalisation of Money: the argument refined ; an analysis of the theory and practice of concurrent currencies*, London: Institute of Economic Affairs
- Haym, Rudolf. (1857). *Hegel und seine Zeit*, Berlin: G. Olms, reprint, Hildesheim, 1962
- Heckscher, Eli F. (1931). *Merkantilismen*. Stockholm: P.A. Norstedt & Soner
- Heckscher, Eli F. (1935). *Mercantilism as a Unifying System*, authorized translation by M. Shapiro, revised edn, New York: Macmillan and London: Allen and Unwin, reprint 1955
- Hegel, Georg Wilhelm Friedrich. (1802). *The German Constitution, Political Writings*, Cambridge: Cambridge University Press, 1999. German original: Kritik der Verfassung Deutschlands (Proposals for Constitutional Reform), *Gesammelte Werke*, Band 16, Berlin: Andreas Arndt
- Hegel, Georg Wilhelm Friedrich. (1820). *Grundlinien der Philosophie des Rechts. Naturrecht und Staatswissenschaft*, translated by S.W Dyde as *Philosophy of Right*, Batoche Books, Kitchener, 2001

- Hegel, Georg Wilhelm Friedrich. (1837). *Philosophy of History*, Great books of the Western World, vol. 46, Chicago: William Benton, 1952-1959, translated by J. Sibree, reprinted in Ontario: Batoche Books, Kitchener, 2001. German original: *Philosophie der Geschichte in ihren Hauptresultaten*, Berlin: Förstner, 1837
- Hegel, Georg Wilhelm Friedrich. (1936). *Dokumente zu Hegels Entwicklung*, edited by Johannes Hoffmeister, Stuttgart: Frommanns Verlag
- Hegge, Hjalmar. (1957). *Erkjennelse og virkelighet. Et bidrag til kritikk av teorien om sansekvalitetenes subjektivitet* ('Knowledge and Reality. A Contribution to the Criticism of the Theory of the Subjectivity of Sense Data'), Oslo: Universitetsforlaget
- Hegge, Hjalmar. (1988.) *Frihet, individualitet og samtunn. En moralfilosofisk, erkjennelsesteoretisk og sosialfilosofisk studie i menneskelig eksistens*. Oslo: Universitetsforlaget, translated by by Stephan Rotthaus and Gabriele Sperlich-Rotthaus as *Freiheit, Individualität und Gesellschaft. Eine philosophische Studie zur menschlichen Existenz*, Stuttgart: Verlag Freies Geistesleben, 1992
- Hegge, Hjalmar. (1996). Transcending Darwinism in the Spirit of Goethe's Science: A Philosophical Perspective on the Works of Adolf Portmann, *Newsletter of the Society for the Evolution of Science*, Summer 1996 issue, Vol. 12, No. 2, pp. 1-26
- Heidegger, Martin. (1927). *Sein und Zeit*, Avalun-Verlag, Hellerau bei Dresden, translated as *Being and Time*, SCM Press, 1962
- Heilbroner, Robert. (1989). *The Making of Economic Society*, Prentice Hall, New Jersey
- Hempel, Carl G. (1966). *Philosophy of Natural Science*, Englewood Cliffs, N.J.: Prentice-Hall
- Hildebrand, Bruno. (1848). *Die Nationalökonomie der Gegenwart und Zukunft*. Frankfurt/Main: Literarische Anstalt (J. Rütten)
- Hilferding, Rudolf. (1910). *Das Finanzkapital, Eine Studie über die jüngste Entwicklung des Kapitalismus*, Vienna, Wiener Volksbuchhandlung, (Reprint: Auvermann, Glashütten i.T. 1971, edition in Danish: *Finance Capital*, Copenhagen Rhodos, 1976, edition in English: *Finance Capital: A Study of the Latest Phase of Capitalist Development*, London: Routledge & Kegan Paul
- Hirschmann, Albert O. (1967). *The Strategy of Economic Development*, New Haven: Yale University Press
- Hobbes, Thomas. (1651). *Leviathan, or the Matter, Forme, and Power of a Commonwealth, Ecclesiasticall and Civil*, London: Printed for Andrew Crooke, reprinted by Hamilton, Ont.: McMaster University, 1999
- Hobson, John A. (1909). *The Crisis of Liberalism: New Issues of Democracy*, London: P.S. King & Son
- Hopkirk, Peter. (1994). *On Secret Service East of Constantinople: the plot to bring down the British Empire*, London: John Murray
- Houston, R. A. (1988). *Literacy in Early Modern Europe: Culture and Education, 1500-1800*, London: Longman

- Howard, Sir Michael. (1993). *Cold War, Chill Peace*, Ditchley Foundation Annual Lecture XXX, July 1993, <<http://www.ditchley.co.uk/page/317/lecture-xxx.htm>>, accessed 1998-05-13
- Hudson, Michael. (1968). *Super Imperialism. The Economic Strategy of the American Empire*, Holt, Rinehart and Winston, New York (reprint 1969, 1970, 1971), 2<sup>nd</sup> ed.: *Super Imperialism. The Origin and Fundamentals of U.S. World Dominance*, London: Pluto, 2003
- Hudson, Michael. (1975). *Economics and Technology in 19th Century American Thought: The Neglected American Economists*, New York & London: Garland Publishing, Inc., 2<sup>nd</sup> edition 2010: *America's Protectionist Takeoff 1815-1914*, ISLET
- Hudson, Michael. (1992). *Trade, Development and Foreign Debt. A History of Theories of Polarization and Convergence in the International Economy*. Volume I: International Trade. Volume II: International Finance, London: Pluto Press, 2<sup>nd</sup> edition 2007
- Hudson, Michael. (2011). *Norway's Sovereign Wealth Risk Vortex*, <<http://michael-hudson.com/2011/03/norways-sovereign-wealth-risk-vortex/>> , accessed 2011-03-20, published in Oslo by *Samtiden*, 2-2011, as *Hva får Norge ut av oljefondet*,
- Hughes, Thomas Parkes. (1965). A Technological Frontier: The Railway, in: Bruce Mazlish (ed.). *The Railroad and the Space Program. An Exploration in Historical Analogy*, Series on Technology, Space and Society, no.1, series prepared by the American Academy of Arts and Sciences in collaboration with NASA (the National Aeronautics and Space Administration, Cambridge Mass.: MIT Press.
- Hull, David. (1974). *Philosophy of Biological Science*, Englewood Cliffs, N.J.: Prentice-Hall
- Hume, David. (1742). *Essays, Moral, Political, and Literary*, edited by E. F. Miller, Indianapolis: Liberty Classics
- Hume, David. (1754-62). *History of England. From the Invasion of Julius Caesar to the Abdication of James the Second, 1688*, 6 volumes, reprinted in Boston: Phillips Sampson and Co., 1856
- Hutchinson, Frances. (1997). *The Political Economy of Social Credit and Guild Socialism*, London: Routledge
- Hutchison, Terence Wilmot. (1953). *A Review of Economic Doctrines, 1870-1929*, Oxford: Clarendon Press
- IBRD. (1993). *The East Asian Miracle. Economic Growth and Public Policy*, A World Bank Research Report, IBRD - The International Bank for Reconstruction and Development, New York and Oxford: Oxford University Press
- Ingram, John Kells. (1888). *A History of Political Economy*, Edinburgh: A. & C. Black, reprinted in London: A. and C. Black, 1915, reprinted in *Encyclopedia Britannica 1902: Political Economy*
- Ingram, John Kells. (1902). Political Economy, in *Encyclopedia Britannica 1902*, <<http://www.1902encyclopedia.com/P/POL/political-economy-12.html>>, accessed 2009-09-15

- Irwin, Douglas A. (2002). *Free Trade Under Fire*, Princeton: Princeton University Press, 3<sup>rd</sup> edition 2009
- Israel, J.I. (1992). England's mercantilist response to Dutch world trade primacy, 1647-1674. In S.Groenveld and M.Wintle (eds.), *State and Trade: Government and the Economy in Britain and the Netherlands since the Middle Ages*, Zutphen: Walburg Press.
- Jones, J. R. (1966). *Britain and Europe in the Seventeenth Century*, London: Hodder & Stoughton Educational
- Journal of Economic Issues* (JEI), published by *The Association for Evolutionary Economics* (AFEE). <<http://www.afee.net/>>
- Journal of Institutional Economics* (JOIE), published by *The European Association for Evolutionary Political Economy* (EAEPE), <<http://eaepe.org/>>
- Kant, Immanuel. (1784). Beantwortung der Frage: Was ist Aufklärung?, in *Berlinische Monatsschrift*, Berlin: December 1784, in English translation: An Answer to the Question: "What is Enlightenment?")
- Kant, Immanuel. (1790). *Philosophie der Recht*, published as part two of *Die Metaphysik der Sitten* (1797), translated into English as *The Science of Right*, or more precisely *The Philosophy of Law: An Exposition of the Fundamental Principles of Jurisprudence as the Science of Right*, Edinburgh : T.&T. Clark, 1887, reprint: Clifton N.J. : A. M. Kelley, 1974, published as part two of *The Metaphysics of Morals* (1797)
- Kant, Immanuel. (1797). *Die Metaphysik der Sitten*, reprinted in *Werke*, 6 vols. (edited by Wilhelm Weischedel), Vol. 4, *Schriften zur Ethik u. Religionsphilosophie*, Darmstadt: WBG, 1956, translated into English as *The Metaphysics of Morals*, translated by Mary J. Gregor. Cambridge U. Press, 1996
- Katusa, Marin (2012). The Thing About Thorium: Why The Better Nuclear Fuel May Not Get A Chance, *Forbes*, 2/16/2012 <<http://www.forbes.com/sites/energysource/2012/02/16/the-thing-about-thorium-why-the-better-nuclear-fuel-may-not-get-a-chance/>> , accessed 2012-04-16
- Kaul, Inge and Isabelle Grunberg and Marc A. Ster. (1999). *Global Public Goods. International Cooperation in the 21<sup>st</sup> Century*, UNDP – The United Nations Development Programme, New York and Oxford: Oxford University Press
- Kennedy, Paul. (1976). *The Rise and Fall of British Naval Mastery*, London: Fontana Press, reprint 1991
- Kennedy, Paul and Anthony Nicholls. (eds.). (1981). *Nationalist and Racialist Movements in Britain*, Oxford: Macmillan
- Kennedy, Paul. (1989). *The Rise and Fall of Great Powers, Economic Change and Military Conflict 1500 to 2000*, London: Fontana Press, 1988
- Keynes, J.M. (1926). *The End of Laissez Faire*, London: Leonard & Virginia Woolf at the Hogart Press
- Keynes, J.M. (1930). *A Treatise on Money*, 2 vols. London: Macmillan
- Keynes, J.M. (1933). *The Means to Prosperity*, London: Macmillan



- Keynes, J.M. (1936). *The General Theory of Employment Interest and Money*, London: Macmillan
- Kiker, B. F. (1966). The historical roots of the concept of human capital, *The Journal of Political Economy*, vol. 74, pp. 481–499
- Kitson, Arthur. (1894). *A Scientific Solution to the Money Question*, London: Boston
- Klausinger, Hansjörg. (1999). German Anticipations of the Keynesian Revolution?: The Case of Lautenbach, Neisser and Röpke', *The European Journal of the History of Economic Thought*, 6: 3, 378 – 403
- Kock, W.J. de. (1981). The Anglo-Boer War, 1899-1902, in Muller, C.F.J. (ed.). *Five Hundred Years. A History of South Africa*, Pretoria: Academica, pp. 328-361
- Kropotkin, Peter A. (1904). *Mutual Aid, a factor of evolution*, London: W. Heinemann
- Kreckel, Reinhard. (ed). (1983). *Soziale Ungleichheiten*, Soziale Welt, Sonderheft 2, Goettingen: Otto Schartz & Co
- Krugman, Paul. (1994a). Competitiveness: A Dangerous Obsession, *Foreign Affairs* March/April 1994, vol. 73, no. 2
- Krugman, Paul. (1994b). Proving my Point. *Foreign Affairs*, July/August 1994, vol. 73, no. 2
- Krugman, Paul. (1996). *Ricardo's Difficult Idea*, paper for Manchester conference on free trade, March 1996, <<http://web.mit.edu/krugman/www/ricardo.htm>> , accessed 2008-07-13
- Krugman, Paul. (2009). Chinese New Year, the *New York Times*, December 31, 2009  
<<http://www.nytimes.com/2010/01/01/opinion/01krugman.html>>, accessed 2010-01-15
- Kuhn, Thomas. (1962). *The Structure of Scientific Revolutions*, Chicago: University of Chicago Press, 2nd edition 1970
- Lachmann, Ludwig M. (1973). *Drei Essays über Max Webers geistiges Vermächtnis* Tübingen: Mohr
- Lambert, Richard. (2010). Interview on BBC World's *Hardtalk*, 2010-07-14, see also <<http://news.bbc.co.uk/2/hi/programmes/hardtalk/default.stm>>
- Landes, David. (1969). *The Unbound Prometheus*, Cambridge: Cambridge University Press
- Laue, Theodor von. (1963). *Sergei Witte and the Industrialisation of Russia*, New York: Columbia U.P. reprint 1969, Philadelphia: J. B. Lippincott
- Lawrence, P. (1980). *Managers and Management in West Germany*. London: Croon Helm
- Leibniz, Gottfried Wilhelm. (1671a) *On the Establishment of a Society in Germany for the Promotion of the Arts and Sciences*", in *Essai de quelques Raisonnements nouveaux sur la Vie humaine et sur le Nombre des Hommes*, in Works (Klopp edition) first series, vol.v, pp.326-337; also p.18, (Stangeland p.207), and in 1739-40; king *Friedrich II the great* in *Oeuvres de Frédéric le Grand*, viii, and in

- Spannaus, Nancy and Christopher White (ed). (1977), *The Political Economy of the American Revolution*, Washington D.C.: Executive Intelligence Review, pp. 214-224, 2nd ed. 1996, also reprinted by *Fidelio*, Vol. 1, No, 2 Spring 1992
- Leibniz, Gottfried Wilhelm. (1671b). *Society and Economy*" in Essai de quelques Raisonnements nouveaux sur la Vie humaine et sur le Nombre des Hommes, in Works (Klopp edition) first series, vol.v, pp.326-337; also p.18, (Stangeland, 1904, p.207), and in 1739-40; King *Friedrich II the great* in Oeuvres de Frédéric le Grand, viii, and in Spannaus, Nancy and Christopher White (ed). (1977), *The Political Economy of the American Revolution*, Washington D.C.: Executive Intelligence Review, pp. 214-224, 2nd ed. 1996, also reprinted by *Fidelio*, Vol. 1, No, 2 Spring 1992
- Leontieff, Vassilij. (1928). *Die Wirtschaft als Kreislauf*, Tübingen: Mohr
- Leontieff, Vassilij. (1994). Review of: Shigeto Tsuru, Japan's capitalism, creative defeat and beyond, Foreword by John Kenneth Galbraith, University of Cambridge Press, Cambridge 1993, in: *Journal of Economic Literature*: Vol.XXXII (June), p. 733
- Lin, Cynthia. (2011). Pimco's Gross Sees Little Value In Treasuries As US Debt Grows, *Wall Street Journal Online*, March 31. 2011, <<http://online.wsj.com/article/ON-CO-20110331-809869.html>>, accessed at 2011-04-08
- Lind, Michael. (1994). The Op-Ed History of America. *The National Interest*. Issue: 37. Publication Date: Fall 1994, pp. 16 ff
- Lind, Michael. (1994). Hamilton's Legacy. *The Wilson Quarterly*. Volume: 18. Issue: 3. Publication Date: Summer 1994, pp. 40 ff
- Li Yang. (2010). Move over West, Asia is here, *China Daily*, 23 December 2010, p.9, < [http://www.chinadaily.com.cn/opinion/2010-12/23/content\\_11742747.htm](http://www.chinadaily.com.cn/opinion/2010-12/23/content_11742747.htm)> Accessed 2011-05-14
- Locke, Robert R. (2009). Managerialism and the Demise of the Big Three, *Real-World Economics Review*, v. 51, 2009, pp. 28-47
- Locke, Robert R. and J.-C. Spender. (2012). *Confronting Managerialism. How the Business Elite and Their Schools Threw Our Lives Out of Balance*, London & New York: Zed Books
- Lotze, Hermann. (1856–1864). *Mikrokosmos. Ideen zur Naturgeschichte und Geschichte der Menschheit. Versuch einer Anthropologie*, 3 vols. Leipzig: S. Hirzel, reprinted, 1923
- Lundvall, Bengt-Åge. (ed.) (1992). *National Innovation Systems: Towards a Theory of Innovation and Interactive Learning*, London: Pinter
- Lundvall, Bengt-Åke. (2007). National Innovation Systems - Analytical Concept and Development Tool, *Industry and Innovation*. Feb 2007
- Luther, Martin. (1523). *Legitimation of Worldly Authority*, quoted in Gazdar, 1998, p, 141
- Machiavelli, Niccolò di Bernardo dei. (1513). *Il Principe*, first printed 1532, translated as *The Prince*, London: Penguin Classics, 1995
- MacDonogh, Giles. (1994). *Prussia. The Perversion of an Idea*, London: Sinclair-Stevenson, Reprint by Mandarin paperbacks, London 1995

- Mach, Ernst. (1908). *Die Mechanik in ihrer Entwicklung*, Leipzig: F. A. Brockhaus
- Machlup, Fritz. (1962). *The Production and Distribution of Knowledge in the United States*, London: Macmillan
- Machlup, Fritz. (1980-1984). *Knowledge: Its Creation, Distribution, and Economic Significance*, vol. 1: Knowledge and knowledge production; vol. 2: The branches of learning; vol. 3: The economics of information and human capital, Princeton, NJ: Princeton University Press
- Mackinder, Halford John. (1904). The Geographical Pivot of History, in *Geographical Journal*, No.23, 1904, London: Royal Geographical Society. Reprint in: Mackinder, 1962, pp.209-264.
- Mackinder, Halford John. (1919-1962). *Democratic Ideals and Reality. A Study in the Politics of Reconstruction*, (1919) edited by Anthony J. Pearce, New York: Norton & Company, reprint 1942; 1962
- Magnusson, Lars. (2000). *An Economic History of Sweden*, London: Routledge
- Magnusson, Lars. (2004). *The Tradition of Free Trade*, London and New York: Routledge, Taylor & Francis Group
- Maddison, Angus. (1982). *Phases of Capitalist Development*, Oxford and New York: Oxford University Press
- Mandeville, Bernard de. (1705). *Fable of the Bees, or Private Vices, Public Benefits*, 2nd ed. 1714, reprint: Oxford Clarendon Press, 1924, and Indianapolis: Liberty Fund, 1988
- Malthus, Thomas Robert. (1798). *Essay on the Principles of Population, as it affects the Future Improvement of Society with remarks on the Speculations of Mr. Godwin, M. Condorcet, and Other Writers*, London: J. Johnson in St. Paul's Church-Yard, reprint, Harmondsworth: Penguin, 1979
- Malthus, Thomas Robert. (1830). *A Summary View of the Principle of Population*, London: John Murray, reprint, Harmondsworth: Penguin, 1979
- Malthus, Thomas Robert. (1836). *Principles of Political Economy*, London: W. Pickering
- Mandel, Ernest. (1990). Marx's Labour Theory of Value, in John Eatwell, Murray Milgate & Peter Newman (eds.), *Marxian economics*, London: Norton, p.1-38
- Mankiw, N. Gregory. (1998). *Principles of Economics*, Cincinnati: South-Western College Pub, 7<sup>th</sup> edition 2011
- Mankiw, N. Gregory. (2002). *Macroeconomics*, New York: Worth Publishers, 5th edition
- Mankiw, N. Gregory. (2006). *Microeconomics*, Stamford, Ct: Cengage Learning, 3<sup>rd</sup> ed.
- Marx, Karl. (1846). *The German Ideology. Critique of Modern German Philosophy According to Its Representatives Feuerbach, B. Bauer and Stirner, and of German Socialism According to Its Various Prophets*, Written: Fall 1845 to mid-1846; First published in full:

- 1932, reprinted in Marx-Engels Collected Works, Volume 5, London: Lawrence & Wishart, 1975-2004
- Marx, Karl. (1858). *Grundrisse der Kritik der politischen Ökonomie*, first printed in Stuttgart: Die Neue Zeit, 1903, translated as *Grundrisse*, translated edited and with a foreword by Martin Nicolaus, New York: Vintage Books, 1973
- Marx, Karl and Friedrich Engels. (1848). *Manifest der Kommunistischen Partei*, London: Deutsche Londoner Zeitung, translated by Helen Macfarlane as *The Communist Manifesto*, London: The Red Republican, 1850
- Marx, Karl, (1867). *Capital: a critical analysis of capitalist production*, London: George Routledge, 1887, translation of *Das Kapital*, Hamburg: Verlag von Otto Meissner. Danish translation: *Kapitalen*, Copenhagen: Rhodos, 1972
- Maseng, Einar. (1972). *Utsikt over de nordeuropeiske lands utenrikspolitikk i de siste århundrer*. Vol. III: 1900-tallet. *Det politiske samarbeid innen Norden opphører*, 1972, published posthumt, Oslo: Universitetsforlaget, 2005
- Maurois, André. (1933). *King Edward and his Times*, London: Cassell
- Meek, R.L. (1951). Physiocracy and the Early Theories of Under-Consumption, *Economica*, New Series, Vol. 18, No. 71 (Aug., 1951), pp. 229-269
- Meier, Gerald M. and Robert E. Baldwin. (1957). *Economic Development: Theory, History, Policy*, London and New York: John Wiley
- Michalet, C. A. (1981), *Competitiveness and internationalisation*, STI/SPR/81.63, Paris: OECD
- Michels, Robert. (1911). *Zur Soziologie des Parteiwesens in der modernen Demokratie. Untersuchungen über die oligarchischen Tendenzen des Gruppenlebens*, translated from the Italian version, by Eden and Cedar Paul as *Political Parties: A Sociological Study of the Oligarchical Tendencies of Modern Democracy*, New York: Hearst's International Library Co., 1915
- Miettinen, Reijo. (2002). *National Innovation System: Scientific Concept or Political Rhetoric*, Helsinki: Edita,
- Mill, John Stuart. (1848). *Principles of Political Economy* with some of their applications to social philosophy, London: J.W. Parker, reprints 1849, 1852, 1857, 1862, 1865, and 1871, and by Penguin Books Ltd., Harmondsworth 1970
- Milne, Richard. (2008). Carmakers ask EU for US-style loan, *Financial Times*, October 3 2008, <<http://www.ft.com/cms/s/0/4a2fc5c2-9124-11dd-b5cd-0000779fd18c.html>>, accessed 2008-10-04
- Milner, Alfred, Viscount. (1907). *Tariff Reform*, Ch. 1. in Milner, 1908.
- Milner, Alfred, Viscount. (1908). *Constructive Imperialism. Five Speeches*, London: The National Review Office
- Mises, Ludwig Heinrich Edler von. (1940). *Nationalökonomie. Theorie Des Handelns und Wirthschaftens*, Geneva: Editions Union, translated as *Human Action. A Treatise on Economics*, San Francisco: Fox & Wilkes, 1949

- Mohl, Robert von. (1832-1834). *Die deutsche Polizeiwissenschaft nach den Grundsätzen des Rechtsstaates*, Tübingen: Laupp (Meaning: 'Political Science according to the Principles of the Constitutional State')
- Morris, A.J.A. (1984). *The Scaremongers; The Advocacy of War and Re-armament 1896-1914*, Routledge & Kegan Paul, London
- Muller, C.F.J. (ed.). *Five Hundred Years. A History of South Africa*, Pretoria: Academica
- Müller, Adam. (1808-1809). *Die Elemente der Staatskunst. Sechszund-dreißig Vorlesungen. Ungekürzte Ausgabe*, Berlin: Haude & Spenersche Verlagsbuchhandlung, reprint 1936 and 1968 by the same publisher
- Mummery, Albert Frederick and John Atkinson Hobson. (1889). *Physiology of Industry*, London: J. Murray
- Möser, Justus. (1774–76). *Patriotische Phantasien*, 4 vols., published by his daughter, Jenny von Voigts in Wöchentliche Osnabrückische Intelligenzblätter, reprinted with preface by Reinhard Zöllner, Bibliothek der deutschen Nationalliteratur des achtzehnten und neunzehnten Jahrhunderts, Leipzig: Brockhaus, 1871
- Nelson, Richard. (ed.) (1993). *National Innovation Systems. A Comparative Analysis*, New York/Oxford: Oxford University Press
- Neukrichen, Heinz. (1982). *Seemacht im Spiegel der Geschichte*, Berlin: VEB Verlag für Verkehrswesen, reprint by Gondrom, Berlin 1988
- Newton, Isaac. (1687). *Philosophiæ naturalis principia mathematica*, translated by Andrew Motte, 1729, reprint of 3<sup>rd</sup> ed. assembled and ed. by Alexandre Koyré and I Bernard Cohen with the assistance of Anne Whitman, Cambridge, MA, Harvard UP, 1972
- Newton-Smith, W.H. (1981). *The Rationality of Science*, Boston, London, Henley: Routledge and Kegan Paul
- Nisbet, Robert Alexander. (1966). *The Sociological Tradition*, London: Basic Books
- Nisbet, Robert Alexander. (1969). *Social Change and History: Aspects of the Western Theory of Development*, New York: Oxford University Press
- Nisbet, Robert. (1979). The Idea of Progress, *Literature of Liberty: A Review of Contemporary Liberal Thought*, vol. II, no. 1, January/March 1979, Cato Institute (1978-1979) and the Institute for Humane Studies, pp. 7-37
- Nisbet, Robert Alexander. (1980). *History of the Idea of Progress*, New York: Basic Books
- Nisbet, Robert Alexander. (1986). *Conservatism: Dream and Reality, Concepts in the Social Sciences*, edited by Frank Parkin, Magdalen College, Oxford, Milton Keynes: Open University Press
- North, Gary. (1968). *Marx's religion of revolution - The doctrine of creative destruction*, New Jersey: Craig Press, second edition published as *Marx's religion of revolution. Regeneration through Chaos*, Institute For Christian Economic, 1989

- NRK-1. (1996). Interview with a Taiwanese official on the "Asian Miracle", *Utenriksmagasinet* (a fortnightly Norwegian television program on foreign affairs), Aug. 1996, Oslo: NRK-1
- Nurkse, Ragnar. (1953). *The Problem of Capital Formation in Underdeveloped Countries*, New York and Oxford: Blackwell
- OECD. (1991). *Technology and Productivity. The Challenge for Economic Policy*, Paris: OECD Publications
- OECD. (1992). *Technology and the Economy. The Key Relationships*, Paris: OECD Publications
- OECD. (1997). *National Innovation Systems*, Paris: OECD Publications
- Olson, Mancur Jr. (1965). *The Logic of Collective Action: Public Goods and the Theory of Groups*, Cambridge Mass.: Harvard University Press, second and revised ed. 1971
- O'Neill, Jim. (2008). Boom time for the global bourgeoisie, *Financial Times*, 15 July 2008, p. 16,  
<<http://www.ft.com/cms/s/0/7b7422a2-5274-11dd-9ba7-000077b07658.html#axzz1IrNiQXHQ>>, accessed 2009-04-07
- Oppenheimer, Franz. (1905). *Der Staat*, Frankfurt am Main: Literarische Anstalt Rütten & Loening, authorized translation by John M. Gitterman: *The State: Its History and Development viewed Sociologically*, New York: B.W. Huebsch, 1922
- Pakenham, Thomas. (1979). *The Boer War*, New York: Random House
- Palm, Franklin Charles. (1922). *The Economic Ideas of Richelieu*, Dissertation 1915, Urbana Ill.: Univ. of Illinois
- Palmer, R.R. and Joel Colton. (1995). *A History of the Modern World*, 8.ed., New York: McGraw-Hill (1950)
- Pentland, William. (2011). Is Thorium the Biggest Energy Breakthrough Since Fire? - Possibly, *Forbes*, 2011-09-11,  
<<http://www.forbes.com/sites/williampentland/2011/09/11/is-thorium-the-biggest-energy-breakthrough-since-fire-possibly/>> ,  
accessed 2011-10-18
- Pigou, Arthur Cecil. (1928). *A Study in Public Finance*, London: Macmillan,
- Plato. (360 BC). *Theaetetus*, translated with notes by John McDowell: Oxford Clarendon Press, 1973
- Polanyi, Karl. (1944). *The Great Transformation, the political and economic origins of our time*, reprint: Boston: Beacon Press, 1957
- Polanyi, Michael. (1967). Life transcending Physics and Chemistry, *Chemical and Engineering News*, 45, No. 35, 1967, p. 64ff
- Porter, Michael E. (1990). *The Competitive Advantage of Nations*, London: Macmillan
- Priddat, Birger P. (1990). *Hegel als Ökonom*, Volkswirtschaftliche Schriften Nr. 403, Berlin: Duncker & Humblodt
- Pugh, Philip G. (1986). *The Cost of Sea Power. The Influence of Money on Naval Affairs from 1815 to the Present Day*, London: Conway Maritime Press

- Quigley, Carroll. (1966). *Tragedy and Hope, A History of the World in Our Time*, New York: Macmillan.
- Quine, Willard Van Orman. (1960). *Word and Object. Studies in Communication*, Cambridge, MA: MIT Press
- Raleigh, Sir Walter. (1615). A Discourse of the Invention of Ships, Anchors, Compass, & c., in Raleigh. (1650). *The Works of Sir Walter Raleigh*
- Raleigh, Sir Walter. (1650). *The Works of Sir Walter Raleigh*, 8 vols, reprinted with an introductory biography by Oldys and Birch, Oxford: at the University Press, 1829, reprinted by Kessinger Publishing, USA 1965 and 2006; by Gale Ecco, USA 2010; and by Nabu PR, India 2010
- Ratzel, Friedrich. (1897). *Politische Geographie*, 3rd ed. Munich & Berlin: Oldenbourg
- Rawlinson, George (1889). *History of Phoenicia*, London: Longmans, Green, and Co.
- Real-World Economics Review*, formerly, the *Post-Autistic Economics Review*, published by the World Economics Association
- Reuters. (2004). Some on Wall Street see big markets drama in 2005, *Reuters*, Thu Dec 23, 2004 01:00 PM ET, By Megan Davies  
<[http://yahoo.reuters.com/financeQuoteCompanyNewsArticle.jhtml?duid=mtfh21158\\_2004-12-23\\_18-00-05\\_n23379455\\_newsml](http://yahoo.reuters.com/financeQuoteCompanyNewsArticle.jhtml?duid=mtfh21158_2004-12-23_18-00-05_n23379455_newsml)>, accessed 2004.12.26
- Reinert, Erik S. and Arno Mong Daastol. (1997). Exploring the genesis of economic innovations: the religious gestalt-switch and the duty to invent as preconditions for economic growth, *European Journal of Law and Economics*, 4(2/3), pp. 233-283.
- Reinert, Erik S. and Arno Mong Daastol. (2002). The Other Canon and uneven economic development: Renaissance economics as an immaterial and production-based canon in the history of economic thought and in the history of economic policy, in Erik Reinert (ed.), *Evolutionary Economics and Income Inequality*. Aldershot: Edward Elgar
- RePEc. (Research Papers in Economics). (2011). *Top 10% Authors, as of June 2011*, <<http://ideas.repec.org/top/top.person.all.html>> , accessed June 2011
- Reuters. (2004). Some on Wall Street see big markets drama in 2005, *Reuters*, Thu Dec 23, 2004 01:00 PM ET, By Megan Davies  
<[http://yahoo.reuters.com/financeQuoteCompanyNewsArticle.jhtml?duid=mtfh21158\\_2004-12-23\\_18-00-05\\_n23379455\\_newsml](http://yahoo.reuters.com/financeQuoteCompanyNewsArticle.jhtml?duid=mtfh21158_2004-12-23_18-00-05_n23379455_newsml)>, Accessed 2004.12.26
- Ricardo, David. (1817). *The Principles of Economy and Taxation*, London: John Murray, Albemarle-Street, 3<sup>rd</sup> edition 1821, reprint, London: Dent & Sons, 1973
- Rodrik, Dani. (2007). *Martin Wolf makes my day*, Rodrik's weblog, June 19, 2007  
<[http://rodrik.typepad.com/dani\\_rodriks\\_weblog/2007/06/martin\\_wolf\\_mak.html](http://rodrik.typepad.com/dani_rodriks_weblog/2007/06/martin_wolf_mak.html)>, accessed 2010-04-05

- Rodrik, Dani. (2009). Making Room for China, *Project Syndicate*, Dec. 11<sup>th</sup>,  
< <http://www.project-syndicate.org/commentary/rodrik38> >,  
accessed 2009-12-12
- Roll, Eric. (1973). *A History of Economic Thought*, London: Faber
- Romer, David. (2007). *Advanced Macroeconomics*, New York: McGraw-Hill, , 3<sup>rd</sup> edition
- Ropp, Theodore. (1959). *War in the Modern World*, Durham: Duke University Press, 2nd printing, revised 1960
- Roscher, Wilhelm Georg Heinrich. (1849). *Die Produktionskrisen, mit besonderer Rücksicht auf die letzten Jahrzehnte in die Gegenwart*, Brockhaus
- Roscher, Wilhelm Georg Heinrich. (1861). *Ansichten der Volkswirtschaft aus dem geschichtlichen Standpunkte*, Leipzig and Heidelberg: Winter'sche Verlagshandlung
- Roscher, Wilhelm Georg Heinrich. (1874). *Geschichte der National-Ökonomik in Deutschland*, München: R. Oldenbourg
- Roscher, Wilhelm Georg Heinrich. (1877). *Principles of Political Economy*, translated by John J. Lalor from the German original: *Grundlage*, 13th ed. 1877, Chicago: Callaghan & Co, 1878, reprinted 1882
- Rostow, Walter. (1960). *The Process of Economic Growth*, Oxford: Oxford University Press.
- Roth, Timothy P. (1999). Consequentialism, rights, and the new social welfare theory, *The Journal of Socio-Economics*, January 01, 1999, < <http://www.accessmylibrary.com/article-1G1-55685137/consequentialism-rights-and-new.html>> Accessed 2011-05-20
- Sampson, Anthony. (1993). *The Essential Anatomy of Britain. Democracy in Crisis*, rev.ed., Sevenoaks, Kent: Coronet Books, Hodder and Stoughton (1992) (1 ed.: 1962).
- Samuelson, Paul A. (1954). The Pure Theory of Public Expenditure. *The Review of Economics and Statistics*, Vol. 36, No. 4, Nov. 1954, pp. 387-389
- Samuelson, Paul A. (1964). Theoretical Notes on Trade Problems, *The Review of Economics and Statistics*, Vol. 46, No. 2 (May, 1964), pp. 145-154
- Say, Jean Baptiste. (1803). *Traité d'économie politique, ou simple exposition de la manière dont se forment, se distribuent, et se composent les richesses*, translated into English as, *A Treatise on Political Economy: or the Production, Distribution, and Consumption of Wealth*, ed. Clement C. Biddle, trans. by C. R. Prinsep, from the 4th ed. of the French, Philadelphia: Lippincott, Grambo & Co., 1855. 4th-5<sup>th</sup> ed.
- Scally, Robert James. (1975). *The Origins of the Lloyd George Coalition: The Politics of Social-Imperialism 1900-1918*, Princeton, NJ: Princeton Univ. Press



- Schneider, Herbert W. (1946). *A History of American Philosophy*, New York: Columbia University Press, 2<sup>nd</sup> ed. 1963
- Schmoller, Gustav von. (1884). *The mercantile system and its historical significance*, New York: A. M. Kelley, 1967, Reprint of the 1897 translation of a chapter from the author's *Studien über die wirtschaftliche Politik Friedrichs des Grossen*, in *Jahrbuch für Gesetzgebung, Verwaltung und Volkswirtschaft in Deutschen Reich*, Neue Folge, 1884
- Schmoller, Gustav. (1900 and 1904). *Grundriss der Allgemeinen Volkswirtschaftslehre*, I-II, Berlin: Duncker & Humblot, last edition 1923
- Schrödinger, Erwin. (1944). *What Is Life?*, Cambridge: The University Press
- Schultz, Theodore William. (1963). *The Economic Value of Education*, New York: Columbia University Press,
- Schumacher, Ernst Friedrich. (1977). *A Guide for the Perplexed*, London: Jonathan Cape
- Schumpeter, Joseph A. (1911). *Theorie der wirtschaftlichen Entwicklung*, translated as *The Theory of Economic Development: An inquiry into profits, capital, credit, interest and the business cycle*, Cambridge Mass.: Harvard University Press, 1934
- Schumpeter, Joseph A. (1912). *Economic Doctrine and Method: An Historical Sketch*, New York: Oxford University Press, 1954, translated from the German original by R. Aris, *Epochen der Dogmen- und Methodengeschichte*, Tübingen: J. C. B. Mohr (Paul Siebeck) Verlag
- Schumpeter, Joseph Alois. (1934). *The Theory of Economic Development. An Inquiry into Profits, Capital, Credit, Interest and the Business Cycle*, Harvard University Press, London: Oxford University Press, 1961
- Schumpeter, Joseph A. (1954). *History of Economic Analysis*, New York: Oxford U.P., reprint 1976
- Schweigaard, Anton Martin. (1847). *Forelæsninger over den politiske Økonomi*, in Schweigaard, Anton Martin. (1904). *Ungdomsarbeider*, edited by O. Jæger og F. Stang, Kristiania
- Schweigaard, Anton Martin. (1904). *Ungdomsarbeider*, edited by Oskar Jæger and Fredrik Stang, Kristiania: Aschehoug
- Searle, G.R. (1971). *The Quest for National Efficiency: a study in British politics and British political thought, 1899-1914*, Oxford: Blackwell
- Searle, G. R. (1976). *Eugenics and politics in Britain, 1900-1914*, i serien Science in history; vol. 3, Leyden: Noordhoff International Pub.
- Semmel, Bernard. (1970). *The Rise of Free Trade Imperialism: Classical Political Economy, the Empire of Free Trade and Imperialism 1750-1850*, Cambridge: at the University Press
- Senghaas, Dieter. (1985). *Von Europa lernen. Entwicklungsgeschichtliche Betrachtungen*. Frankfurt am Main: Suhrkamp Verlag, translated from the as, *The European Experience*, New Hampshire: Berg, Dover
- Semmel, Bernard. (1960). *Imperialism and Social Reform: English Social-Imperial Thought, 1895-1914*, London: G. Allen & Unwin

- Serra, Antonio. (1613). *Breve trattato delle causa che possono far abbondare li regni d'oro e argento dove non sono miniere*, Naples: Lazarro Scoriggio
- Sidgwick, Henry. (1883). *Principles of Political Economy*, London: Macmillan and Co.
- Simmel, Georg. (1903). *Die Großstädte und das Geistesleben*, Stuttgart: Brücke und Tür, reprint 1957, originally published as „Die Grossstadt. Vorträge und Aufsätze zur Städteausstellung“, in *Jahrbuch der Gehe-Stiftung Dresden*, Vol. 9, 1903, pp. 185-206, Dresden: Th. Petermann. Translated by Kurt Wolff into English as *The Metropolis and Mental Life*, in *The Sociology of Georg Simmel*, New York: Free Press, 1950, pp.409-424
- Sismondi, Sismondi, Jean-Charles-Léonard Simonde de. (1815). *Nouveaux principes d'économie politique, ou de la richesse dans ses rapports avec la population*, Paris, Delaunay, Translated as *Political economy and the philosophy of government : selections from the writings of J. C. L. Simonde de Sismondi*, London, Chapman, 1847, reprint New York: Kelley, 1966
- Sismondi, J.C.L. Simonde de. (May 1824). Balance des consommations avec les productions, Paris: *Revue encyclopédie*
- Small, Albion. (1909). *The Cameralists. The Pioneers of German Social Policy*, Chicago: Chicago University Press; London: T. Fisher Unwin
- Skinner, A. S. (1974). Adam Smith, Science and the Role of the Imagination, in Todd, W. B. (ed.). *Hume and the Enlightenment*, Edinburgh: Edinburgh University Press, pp. 164-88
- Skinner, A. S. and T. Wilson (eds). (1975). *Essays on Adam Smith*, Oxford: Clarendon Press
- Smith, Adam. (1759). *The Theory of Moral Sentiments*, Edinburgh: A. Kincaid & J. Bell, reprint: Indianapolis, Ill.: Liberty Classics, 1976
- Smith, Adam. (1762). *Lectures On Jurisprudence*, in Glasgow Edition of the Works and Correspondence of Adam Smith, Vol. 5, Indianapolis: Liberty Fund, 1982
- Smith, Adam. (1776). *An Inquiry into the Nature and Causes of the Wealth of Nations*, London: Methuen & Co., Ltd., reprint: Indianapolis: Liberty Fund, 1981, 2 vols, (reprint of the Clarendon Press edition, Oxford, 1976, with Edward Cannan's introduction and original index from 1922)
- Snow, C. P. (1959-1964). *The Two Cultures*, with an introduction by Stefan Collini, Cambridge: Cambridge University Press
- Soddy, Frederick. (1934). *The Role of Money. What it should be contrasted with what it has become*, London: George Routledge & Sons, Ltd.
- Solow, Robert M. (1956). A Contribution to the Theory of Economic Growth, *Quarterly Journal of Economics*, 1956: 70, pp. 65-94
- Solow, Robert M. (1957). Technical Change and the Aggregate Production Function, *Review of Economics and Statistics*, August 1957

- Sombart, Werner. (1896). *Sozialismus und soziale Bewegung*, Jena: Verlag von Gustav Fischer, translated as *Socialism and the Social Movement in the 19<sup>th</sup> Century*, New York: G.P. Putnam's Sons, 1898
- Sombart, Werner. (1911). *Die Juden und das Wirtschaftsleben*, Leipzig: Duncker & Humblot, translated as *The Jews and Modern Capitalism*, Batoche Books, Kitchener, 2001
- Sombart, Werner. (1913). *Der Bourgeois: zur Geistesgeschichte des modernen Wirtschaftsmensche*, München und Leipzig: Duncker & Humblot, translated as *The Quintessence of Capitalism*, London: Unwin, 1915
- Sombart, Werner. (1913). *Luxus und Kapitalismus*. München: Duncker & Humblot, translated by W. R. Dittmar with an introduction by Philip Siegelman as *Luxury and Capitalism*, Ann Arbor: University of Michigan Press, 1967
- Sombart, Werner. (1927). *Das Wirtschaftsleben im Zeitalter des Hochkapitalismus*, Munich: Duncker & Humblot
- Sombart, Werner. (1934). *Deutsche Sozialismus*, Charlottenburg: Buchholz & Weisswange, translated and edited by Karl F. Gusei, with a portrait, as *A New Social Philosophy*, Princeton: Princeton University Press, 1937; 1969
- Spargo, John (1919). *Bolshevism. The Enemy of Political and Industrial Democracy*, New York and London: Harper & Brothers
- Spencer, Herbert. (1864-1867). *The Principles of Biology*, 2 volumes, London: Williams & Norgate, revised and enlarged: London: Williams & Norgate, 1898, 1899
- Sraffa, Piero. (1960). *Production of Commodity by Means of Commodities*, Cambridge: Cambridge University Press reprints
- Stead, William Thomas. (1899). *The United States of Europe on the Eve of the Parliament of Peace*, London: "Review of Reviews" Office
- Steiner, Rudolf. (1894). *Die Philosophie der Freiheit — Grundzüge einer modernen Weltanschauung. Seelische Beobachtungsergebnisse nach naturwissenschaftlicher Methode*, Berlin: Felber, edited by Harry Collison and translated by Prof. and Mrs. R. F. Alfred Hoernlé as, *Truth and Knowledge: Introduction to The Philosophy of Freedom*, London and New York: G. P. Putnam's Sons, 1916
- Steiner, Rudolf (1919). *Mut zur Freiheit und zur sozialen Gerechtigkeit*. Ein Vortrag vor Arbeitern der Daimler-Werke. Bad Liebenzell: Archiati Verlag ('Courage for Freedom and Social Justice'. A speech held in Stuttgart for the workers at the Daimler industries, 25. April 1919)
- Steiner, Rudolf. (1919). *Die Kernpunkte der Sozialen Frage in den Lebensnotwendigkeiten der Gegenwart und Zukunft*, Dornach: Steiner Verlag; translated by Frank Thomas Smith as *The Threefold Commonwealth*, Anthroposophical Publishing Company, London, 1923; revised and abridged by F. C. Heckel entitled, *The Threefold Social Order*, Anthroposophic Press Inc., New York, 1966

- , reprinted by Rudolf Steiner Press, 1972 and 1977 as *Basic Issues of the Social Question. Towards Social Renewal*
- Steiner, Rudolf. (1922). *World Economics*, Rudolf Steiner Press, London 1977, reprints 1936, 1937, 1949, 1972, translated from the original in German: *Nationalökonomischer Kurs*, Dornach: Steiner Verlag
- Steiner, Zara. (1994). The Fall of Great Britain, Peace, Stability, and Legitimacy, in: Lundestad, Geir. (ed.). *The Fall of Great Powers, Peace, Stability, and Legitimacy*, Nobel Symposium 1987, Oslo-Oxford: Scandinavian University Press / Oxford University Press.
- Sternhell, Zeev and Mario Sznajder, Maia Ashéri. (1994). *The Birth of Fascist Ideology: From Cultural Rebellion to Political Revolution*. Princeton: Princeton University Press
- Steuart, James. (1767). *An Inquiry into the Principles of Political Economy*, London: Printed for A. Millar, and T. Cadell, in the Strand
- Stewart, Dugald. (1793). Account of the Life and Writings of Adam Smith LL.D., from the Transactions of the Royal Society of Edinburgh, read by Mr Stewart, January 21, and March 18, 1793, printed in Stewart, Dugald. (1877). *Collected Works of Dugald Stewart*, vol. 10, pp. 1-98
- Stewart, Dugald. (1877). *Collected Works of Dugald Stewart*, Edinburgh: T & T Clark
- Stiglitz, Joseph E. (1999). Knowledge as a Global Public Good, in *Global Public Goods. International Cooperation in the 21<sup>st</sup> Century*, UNDP – The United Nations Development programme, New York and Oxford: Oxford University Press, pp. 308-326
- Stiglitz, Joseph E. (2003). First Japan, now China is the culprit. In reality, the US has only itself to blame for its swelling trade deficit, October 15, 2003, *The Guardian*, <<http://www.guardian.co.uk/comment/story/0,3604,1063086,00.html>>, accessed 2003-10-17
- Strausz-Hupé, Robert. (1942). *Geopolitics: The Struggle for Space and Power*, New York: G.P. Putnam's sons
- Struve, Peter. (1916). Past and Present of Russian Economics, in D. Duff, *Russian Realities & Problems*, Cambridge: at the University Press, 1917
- Summers, Ann. (1981). The Character of Edwardian Nationalism: Three Popular Leagues, in Kennedy, Paul and Anthony Nicholls. (eds.). (1981). *Nationalist and Racist Movements in Britain*, Oxford: Macmillan
- Sun, Yat-sen. (1920). *The International Development of China*, Shanghai: Commercial Press
- Sutton, Antony Cyril. (1968). *Western Technology and Soviet Economic Development: 1917–1930*, Stanford CA: Hoover Institution Publications
- Sutton, Antony Cyril. (1974). *Wall Street and the Bolshevik Revolution: The Remarkable True Story of the American Capitalists Who Fi-*

- nanced the Russian Communists, New Rochelle, N.Y.: Arlington House
- Taiwan Economic News. (2007). MEOA Formulates Frog-leaping Growth Strategy for Machine-tool Industry, *Taiwan Economic News*, 070307, < <http://www.accessmylibrary.com/article-1G1-160258417/meoa-formulates-frog-leaping.html> > , accessed 2011-06-15
- Taussig, Frank William. (1911). *Principles of Economics*, 2 vols., New York: Macmillan, 4 ed., 1937
- Tawney, Richard. (1926). *Religion and the Rise of Capitalism; A Historical Study*, London: J. Murray
- Taylor, Henry Osborn. (1914). *The Mediaeval Mind*, London: Macmillan,
- Tenenbaum, Joseph. (1976). *Race and Reich: The Story of an Epoch*. Westport, CT: Greenwood Press
- Teune, Henry. (1984). *The Concept of Growth*, UNESCO report
- Teune, Henry. (1988). *Growth*, London: Sage, (A book based on Teune's UNESCO report *The Concept of Growth*, 1984)
- Thatcher, Margaret. (1987). Interview in *The Sunday Times*, Women's Own magazine, September 23, edited version issued by Downing Street 10. October 31 1987
- The Economist*. (1995). On intervention, *The Economist*, Sept. 30, 1995, p. 110
- The Local*. (2010). Exports seen topping €1 trillion next year, *DPA/The Local* , 30 Dec 2010, <<http://www.thelocal.de/money/20101230-32133.html>>, accessed at 2011-03-25
- The Local*. (2011a). Exports grow at record pace in 2010, *AFP/The Local*, 9 Feb 2011, <<http://www.thelocal.de/money/20110209-32983.html>>, accessed at 2011-03-25
- The Local*. (2011b). German exports shift from US to China, *AFP/The Local*, 11-03-2011 11:14 Germany, <<http://www.thelocal.de/money/20110310-33637.html>>, accessed at 2011-03-25
- Thirlwall, A.P. (2006). *Growth and Development: with Special Reference to Developing Economies*, Houndsmills, Basingstoke: Palgrave Macmillan
- Todaro, M. P. and S. C. Smith. (2003). *Economic Development*, London: Pearson
- Todd, W. B. (ed). (1974). *Hume and the Enlightenment*, Edinburgh: Edinburgh University Press
- Trotsky, Lev Davidovich Bronstein. (1929). Communism and Syndicalism, in *The Militant*, Vol. IV No. 8, 15 April 1931, reprinted in in *Leo Trotsky. On the Trade Unions*, Pathfinder Press, 1969
- Trotsky, Lev Davidovich Bronstein. (1969). *On the Trade Unions*, Pathfinder Press, 1969
- Tönnies, Ferdinand. (1887). *Gemeinschaft and Gesellschaft. Abhandlung des Communismus und des Socialismus als empirischer Culturformen*, 2.nd ed. *Gemeinschaft und Gesellschaft. Grundbegriffe der reinen Soziologie*, Berlin: Karl Curtius, translated

- as *Community and Civil Society*, (ed. by Jose Harris), Cambridge University Press, 2001
- Tsuru, Shigeto. (1993). *Japan's capitalism, creative defeat and beyond*, foreword by John Kenneth Galbraith, Cambridge: University of Cambridge Press
- Turunen, Olli. (2007). *Immaterial capital: ideas of human and social capital in the Older Historical School of German Political Economy*, Graduation thesis in history, Department of History and Ethnology, University of Jyväskylä
- Ustaritz, Don G. de. (1753). *Théorie et pratique de commerce et de marine*, Paris
- Veblen, Thorstein Bunde. (1919). *On the natures and uses of sabotage*, New York: Oriole Books
- Statistik des Deutschen Reichs. (1903). Fremdsprachige Minderheiten im Deutschen Reich, Vol. 150: *Die Volkszählung am 1. Dezember 1900 im Deutschen Reich*. Berlin, <<http://www.verwaltungsgeschichte.de/fremdsprachen.html>> , accessed 2010-12-04
- Ward-Perkins, Bryan. (2007). At least it isn't the Dark Ages, *Financial Times* December 22 2009, <<http://www.ft.com/cms/s/0/4b44d88e-ef39-11de-86c4-00144feab49a.html>>, accessed 2009-12-22
- Watson, Paul Joseph, (2010). Brzezinski Decries "Global Political Awakening" During CFR Speech, *Prison Planet.com*, Wednesday, May 19, 2010, < <http://www.prisonplanet.com/brzezinski-decries-global-political-awakening-during-cfr-speech.html> > See also YouTube: < <http://www.youtube.com/watch?v=oDBlABD01U0> >, accessed 2010-06-19
- Weber, Max. (1904). Weber, Max. (1920). *Der protestantische Ethik und der Geist des Kapitalismus*, Tübingen: Mohr, second ed. 1920, translated by Talcott Parsons as *The Protestant Ethic and the Spirit of Capitalism*, with a foreword by R. H. Tawney, London: Unwin University Books, 1929
- Weber, Max. (1922). *Grundriss der Sozialökonomik*, Tübingen: Mohr, Wendler, Eugen (ed). (1996). „*Die Vereinigung des europäischen Kontinents*" Friedrich List - *Gesamteuropäische Wirkungsgeschichte seines ökonomischen Denkens*, Stuttgart: Schäffer-Poeschel Verlag (meaning: "The Unification of the European Continent". Friedrich List – Pan-European History of Impact of His Economic Thought')
- Werner, Richard A. (2005). *New Paradigm in Macroeconomics, Solving the Riddle of Japanese Macroeconomic Performance*, London and New York: Palgrave Macmillan
- Westphal, Kenneth. (1993). The basic context and structure of Hegel's Philosophy of Right, in Beiser, Frederick C. (ed.) (1993). *The Cambridge Companion to Hegel*, Cambridge: Cambridge University Press, chapter 8, pp. 234-269
- Williams, Ernest Edwin George. (1888). *The Case for Protection*, London: Macmillan, 2<sup>nd</sup> ed. London: Grant Richards, 1899

- Williams, Ernest Edwin George. (1896). *Made in Germany*, London: W. Heinemann, reprinted, Harvester Press, 1973
- Windelband, Wilhelm. (1893) *A History of Philosophy*, reprint: Westport Conn.: Greenwood Press, 1977
- Witte, Sergei Iuelevich. (1912). *Konspekt lektsii o narodnom i gosudarstvennom khoziastve*, ('Lecture on the Economy and Government Finance'), 2<sup>nd</sup> ed. St. Petersburg. Translated into German under the title *Vorlesungen über Volks- und Staaatswirtschaft*, 2 Vols, Berlin, 1913
- Witte, Sergei Iuelevich. (1921). *The Memoirs of Count Witte*, translated and edited by Sidney Harcave, New York and Torotno. Doubleday. A re-translation was edited and with an introduction by Sidney Harcave; New York: M.E. Sharpe, Inc., Armonk, 1990
- Wolf, Martin, (2007). Unfettered finance is fast reshaping the global economy, *Financial Times*, June 18, <  
<http://www.ft.com/cms/s/518482b4-1dc5-11dc-89f7-000b5df10621.html> >, accessed 2007-07-05
- Wolf, Martin. (2007). The growth of nations, *Financial Times*, bookreview, 21<sup>st</sup> July 2007, < <http://www.ft.com/cms/s/da491b56-34fd-11dc-bb16-0000779fd2ac.html> >, accessed 2007-07-22
- Wolf, Jim. (2012). U.S. lawmakers seek to block China Huawei, ZTE U.S. inroads,  
 <<http://www.reuters.com/article/2012/10/08/us-usa-china-huawei-zte-idUSBRE8960NH20121008>> , accessed 2012-10-15
- Wolff, Christian. (1749). *Jus Gentium Methodo Scientifica Pertractatum*, Halle, translated as vol.II, and reprinted as vol.I, Oxford: at the Clarendon Press, 1934
- Wurmbrand, Richard. (1986). *Marx and Satan*, OK: Living Sacrifice Book Co.
- Zielenzieger, Kurt. (1914). *Die alten deutschen Kameralisten. Ein Beitrag zur Geschichte der Nationalökonomie und zum Problem des Merkantilismus*, Jena: Fischer
- Zeune, Johann August. (1808). *Gea - Versuch einer wissenschaftlichen Erdbeschreibung*, Berlin: Wittich
- Zyl, M.C van. (1981). States and Colonies in South Africa, 1854-1902, in Muller, C.F.J. (ed.). *Five Hundred Years. A History of South Africa*, Pretoria: Academica, pp. 297-327